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ORIGINAL ARTICLES.

OCULAR TROUBLES AS INFLUENCED BY NASAL DISEASE.

Read in the Section on Ophthalmology, Otology and Laryngology, at the Thirty-Ninth Annual Meeting of the American Medical Association, May, 1888.

BY LEWIS H. TAYLOR, M.D.,

OF WILKESBARRE, PENNA.

"There is no new thing under the sun" has been truly said many years ago, and its application to the various papers read from time to time before this and similar Associations is in the main correct. For, while looking from a different point of view, we may sometimes seem to present certain subjects in new lights, it is nevertheless difficult for us to bring forth matter pathological and therapeutical that has not at some point been touched upon, and possibly ably handled, by others of our professional brethren.

When I first began the consideration of this subject, being led thereto by the perusal of one article, and the treatment in private practice of a number of cases that presented points of interest bearing directly in this line, I was not aware that much had been written upon the relation of ocular and nasal diseases. Had I been familiar with the numerous interesting and valuable contributions to this department of medical literature that have since fallen under my notice I should have hesitated somewhat before being willing to present to you a paper upon a subject already treated so ably and thoroughly by others.

Yet, after all, the field is comparatively a new one, and I have thought it might not be out of place to present, or re-present, if so it be, a few points for discussion, and by the relation of a few cases from my own experience call your attention again to a too much neglected field of our practice.

I will not weary your patience nor occupy your time with a review of the anatomical structures, so familiar to you all, of the nose and the eye. The close connection between the two is apparent to even the superficial observer, and that the diseases of the one might readily be affected by those of the other needs to the thoughtful mind nothing more than the mere statement to carry with it conviction of its truth.

We have all of us at some time had certain puzzling cases, with annoying ocular symptoms that would not yield readily to our ordinary treatment. It may have been certain forms of phlyctenular conjunctivitis, keratitis, trachoma, irritable, dry or sticky lids, with harsh, rough, uncomfortable feeling, some forms of blepharitis, injected lids with enlarged marginal glands, photophobia with neuralgia, or other forms of disease with pronounced ocular symptoms, that we have treated as we do ordinary cases until our failure to influence their course has led us, if we have been wise in our day and generation, to seek the cause of the trouble outside of the eye itself, and we have found it quite often in the adjacent anatomical structures. Or it may be we are consulted by persons without apparent ocular lesions who complain simply of inability to use the eyes any length of time with comfort. A bright light is annoying, the printed page painful, and any continuous effort burdensome. A feeling of itching, fullness, lachrymation upon using the eyes, frequent headaches and other prominent symptoms are present; but when we make a careful examination we find vision normal, both near and distant, conjunctiva not especially swollen, perhaps a slight injection, ophthalmoscopic appearances good, and in fact we can detect nothing in the eyes to cause the troublesome symptoms. An examination of the nasal chamber reveals chronic rhinitis and very frequently hypertrophy of the membrane covering the lower and middle turbinated bones or a deviated septum causing an irregular enlarged passage on the one side, with an almost occluded one on the other. The connection between the eye and nose by means of the lachrymal duct is a direct one, and the lining membrane of the nose being thus continuous with that of the eye, we can readily understand how disease of the one might *pass over*, as we may say, to the other. Thus when a swollen mucous membrane with acrid discharge extends to the tear duct, partly occludes it, causes blenonhoca of the lachrymal sac, and irritating conjunctivitis resulting therefrom, we can readily perceive the cause.

But there are other causes not so apparent. The tear duct is normal; it is patulous, there is no disease communicated from the nose to the eye directly, yet all the phenomena are here. Even

rhinitis is wanting. These are the reflex nasal phenomena so ably discussed by Dr. John N. Mackenzie and others. Sometimes the diagnosis by an inspection of the nose is apparent, but in others it is by no means so easy, and it may only be revealed by a careful and systematic treatment of the nasal difficulty. In my experience, however, the cases have been very few, of those coming under this category, in which a careful examination did not reveal the nasal lesion.

These cases are many of them subject to great variation in the intensity of the symptoms, but they are mainly characterized by lachrymation, injected, swollen conjunctiva, frequently passing into granular lids of the soft watery œdematous variety. There is generally irritation of the meibomian glands, with frequent perversion of the cilia, with yellowish secretion along the edges of the lids. Itching of the eyelids is frequently present. Photophobia not always. These are the patients that go from one physician to another improving slightly under local treatment, but readily relapsing into their old condition which seems aggravated by each additional cold they take. The oculist who studies and treats nothing but the eye will generally fail to give relief because the source of the trouble has not been detected by him and too often not even suspected.

The successful issue will depend mainly upon the proper management of the nasal affection, supplemented of course by a due consideration of what may be needed in the way of soothing applications to the eyes themselves; neglecting, by no means, general hygienic measures and systematic treatment when indicated. I desire here to relate the history of a few cases out of many that have proved interesting to me in the special study of these disorders.

Case 1.—Mrs. W. S., consulted me Dec. 17, for a chronic affection of the eyes which she and her husband declared had lasted nearly thirty years. It was also stated that she had been treated at various times by skillful physicians, also by quacks and old women, but without any permanent good resulting from the same. Vision in OD. $\frac{10}{cc.}$ OS. $\frac{3}{cc.}$ This low vision being largely due to the presence of old corneal opacities. Her eyes are constantly weeping. This lachrymation is increased by any attempt at examination. Cornea is affected; it is rough and the epithelium in some places is apparently destroyed. Old opacities in both. Finely granular lids, cilia considerably affected and blepharitis existing in both eyes, with here and there quite large yellowish spots around the roots of the cilia. Altogether she seemed a most unpromising case for treatment. I gave her at first, atropia and weak zinc sulphate solution, prescribing also an alterative, and recommending the use of hot water to the eyes daily.

The treatment being continued in this direction for a few days only, but with no apparent effect, I made a careful examination of the nose, which revealed the right side almost occluded by swollen membrane over the turbinated bones. There was a discharge of offensive yellowish material and the same had a constant tendency to drip in the throat. She had great difficulty also in breathing through this side of the nose. Vigorous treatment was at once instituted, and from this time on was directed mainly to the nasal condition. I used a spray of Dobell's solution for the purpose of cleansing, and applied the galvano-cautery freely to the enlarged turbinated bone. The left nostril was affected also but in less degree than the right. The cautery was repeated several times, the loop being more frequently used than the knife.

She improved rapidly. In one month the left eye was quite well and the right greatly improved. Early in April I removed with the cautery loop a polypus which had appeared in the right side during a cessation of treatment. The granular lids also were treated, chiefly by copper sulphate, alternating with tannin and glycerine. The improvement, as stated, was rapid and although the old opacities remain, and she is not entirely well, yet a very satisfactory condition is obtained from what seemed a very unpromising case. As a recent test V. in OD. $\frac{20}{cc.}$ OS. $\frac{20}{XL.}$

Case 2.—Miss B., æt. 20, came to me in July, 1886, for treatment of granular lids and partial pannus, with watery rough cornea, especially in OD. I treated her for several months with silver nitrate, glycerole of tannin and various other procedures, be it said to my discredit, without treatment of the nose. She improved somewhat, so that I fitted her with glasses OD. + 1 cy. ax. 105°. OS. + 1.25 cy. ax. 75°. These gave some relief and she left town for a time.

The trouble was very obstinate and she returned in much the same condition as before. This was one of the cases in which inspection of the nares did not reveal rhinitis nor any considerable amount of fetid catarrh. But there was plainly shown an enlargement of the lower turbinated bones covered by almost normal membrane which pressed against the septum of the left side. Pressure readily lessened the swelling but caused increased lachrymation, as did any treatment of the nose. In the Spring of 1887 I began treatment of the nasal difficulty in connection with the eye treatment, cauterizing freely the swollen turbinated membrane. The improvement was marked and rapid; OD. became entirely well in a short time, and OS. much better than it formerly had been. She left town for a time and lately has returned with a relapse in OS. which was not entirely well at the time of leaving. This is improving nicely under treatment.

Case 3.—Mr. L., æt. 25, V. OD. $\frac{15}{XX.}$ OS. $\frac{15}{XV.}$ He

has granular lids, especially in OD., which has pannus over about one-third of the cornea. The lids are velvety, granular and thickened. The meibomian glands are affected. He cannot possibly keep the right eye open. A gush of scalding tears follows every effort at examination. He has had this trouble for many years, and was treated with some relief by a physician seven or eight years ago.

Inspection shows hypertrophy of the nasal membrane on both sides, the right being almost occluded. Thinks he has had catarrh many years. Says his throat feels as if he had something in it all the time. He has granular pharyngitis (Oph.). OD. dimly seen, refraction about normal, but the fundus is greatly blurred. The upper part of cornea is blurred with pannus encroaching on the pupil. OS. nearly normal.

I advised daily treatment with spray to nose and throat, and glycerole of tannin to the lids with a collyrium of zinc sulphate to be used at home. After one week's treatment I advised atropia and bichloride solution at home, and I cauterized freely the right side of the nose.

Pupils dilated readily and I discontinued atropia. In another week he was much better. The cautery was applied two or three times and at the end of the month he was able to discontinue the bandage and resume his work. This patient is still under treatment but is improving rapidly.

Case 4.—Mr. C. L., æt. 22, OD. V. $\frac{20}{XX.}$ OS. $\frac{20}{XX.}$ Jr. I 5″–16″ in each. No As. He comes in reference to his eyes. The lids are very finely granular, scarcely perceptible. He cannot use his eyes any length of time without pain and blurring. They water readily, and at other times have a hot, dry feeling. Oph. about normal in each. There was nothing in the condition of the eyes to suggest so much subjective trouble, but an examination of the nose revealed at once the source of the difficulty. He has nasal catarrh, which has become quite offensive. Membranes are swollen and passages partly occluded. I advised a weak solution of silver nitrate to the lids and spray daily to the nose. After a few days I applied the cautery to the left nostril. He has been under treatment but a short time but the improvement is already manifest.

From a perusal of these cases it is readily seen that in treatment much dependence is placed upon the careful but thorough use of the galvano-cautery, the application of which is rendered painless by the use of cocaine. Now, by thorough use, I do not necessarily mean the searing of the whole surface of both septum and sides of the nose, but the repeated application with small cautery knife or loop to a limited surface until at least a free breathing space is obtained and the ocular trouble removed. I have generally used the flat cautery knife, though I frequently prefer the loop, allowing the wires to sink into the tissues, hoping by the healing of the eschar to obtain contraction of the tissues giving a free passage without destroying so large a surface of membrane.

I do not mean to say that every case of nasal disease will give rise to ocular troubles, but the chronic swelling of the membrane and the cavernous bodies underneath by which the turbinated bodies are pressed against the septum is very apt to give rise to reflex symptoms elsewhere. Dr. J. M. Mackenzie has shown that there are sensitive areas in the nose, especially over the lower turbinated bone, the irritation of which produces reflex symptoms in the eye, larynx, etc. We have all noticed how readily lachrymation is produced in certain individuals by the slightest touch of the nasal membrane, and it is readily seen that the constant pressure of a deviated septum against such must result in annoying and persistent symptoms.

The indication plainly is to get rid of this enlarged sensitive area. In addition to the cautery I have found in many cases good results from the use of nitric acid applied upon a cotton carrier as recommended by Dr. Lefferts, of New York. I have under my care at present a lad whose mother in bringing him to me for his first examination stated that he had used bottle after bottle of cocaine and it had done him no good except for the moment. This tallies with my experience. Cocaine is useless in such cases except for temporary relief.

A word as to prognosis. While I have in many cases seen rapid and satisfactory progress toward recovery as the result of the above mentioned treatment, I cannot report, as do some of our brethren, the healing of these chronic cases in a few days, and with but one or two applications. I believe the majority of them will require protracted treatment lasting for weeks, and even months, to effect permanent cures, with many relapses and discouragements. The most important point is the early recognition of such cases, and then their early and systematic treatment directed especially to the nose and not to the eyes.

The careful and painstaking physician will always examine thoroughly the nose in connection with ocular troubles, and those of us who are none too careful should at least receive sturdy hints to pursue our investigations further, when we see the ocular difficulty fail of improvement under ordinary local treatment.

SIXTEEN INCH CHEST EXPANSION.—The average chest expansion, as we know, is but little more than three inches; six inches expansion is very rare. The New York papers tell of a man in Brooklyn, an Irishman, 5 feet 10 inches high, and 45 years of age, who can expand his chest sixteen inches.

SURGICAL TREATMENT OF EMPYEMA IN CHILDREN.

Read in the Section on Surgery, at the Thirty-ninth Annual Meeting of the American Medical Association, Cincinnati, May 10, 1888.

BY D. A. K. STEELE, M.D.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF SURGERY AND CLINICAL SURGERY IN THE COLLEGE OF PHYSICIANS AND SURGEONS, CHICAGO, ILL.

In presenting for your consideration the subject of the surgical treatment of empyema in children, I am sure that no apology will be necessary, when we consider that more than half the cases of empyema recorded occur during the first decade of life; and that more errors of diagnosis are made than in probably any other thoracic affection.

Definition.—By empyema we mean a collection of pus in the pleural cavity, the abscess bounded upon one side with the soft, receding, compressible lung, and upon the other side with the firm unyielding bony chest wall. And in the consideration of its surgical treatment, we must remember the ever-present surgical maxim, that "wherever we have a pus collection, it must be evacuated in the speediest, safest, and most thorough manner."

Causes.—It is not my purpose in this paper to enter into a consideration of the various causes giving rise to empyema, but I may state that in the majority of cases, it is my belief that a purulent pleuritis is due to auto-infection of a more or less limited area of the inflamed or damaged pleura through the medium of the general circulation; the pus microbe thereby gaining entrance and commencing its destructive action upon tissues that otherwise would only be the seat of a simple pleuritis. Other methods of infection are the use of unclean aspirating needles; rupture of a bronchus; extension of a septic pneumonia; secondary infection from the primary foci in some other point of the body; tubercular infection, etc.

Symptoms.—The symptoms, where we rely upon clinical evidence alone, are not sufficiently pathognomonic to be diagnostic. It is easy to determine by physical examination that we have a pleural sac distended with fluid, but its exact nature can only be determined by the introduction of a hypodermic needle (better of large size). If, following the usual symptoms of an acute pleuritis we have chills, fever, hectic, diarrhœa, and sweating, we are reasonably certain of our diagnosis without the aspirating needle. If these symptoms are accompanied by localized œdema or bulging of the intercostal space, usually the 5th in the mammary line, there is almost absolute certainty of pus in the pleura. The diagnosis may be made as early as the fourth day of the disease, although usually it is delayed until the second week or later. All cases of pneumonia that are tardy in undergoing resolution should awaken a suspicion of empyema. I have seen a number of striking cases of error in diagnosis in cases of this character. Secondary infection of the pericardium is a fatal complication in a number of cases running a rapid course. A striking example of this mode of termination was recently detailed to me by Prof. C. W. Earle.

Empyema, if left to itself, may terminate in recovery in one of three ways according to L. Emmet Holt: (1) by spontaneous absorption of the purulent effusion; (2) by evacuation through the bronchus; (3) by opening externally through the intercostal muscles; but when left to nature the mortality is appalling.

Rilliet and Barthez mention thirty-three cases with four recoveries, twenty-one deaths, and eight not accounted for.

Surgical Treatment.—No absolute rule can be laid down for the management of all cases. We have our choice of operations from the following: For example, we may resort *first*, to aspiration; *second*, aspiration and washing out of the cavity with an antiseptic solution; *third*, thoracentesis with trocar and canula; *fourth*, thoracentesis with sub-aqueous drainage; *fifth*, simple incision; *sixth*, simple incision and drainage; *seventh*, simple incision with through and through drainage, with, or without, antiseptic precautions; *eighth*, subperiosteal resection of rib and drainage; *ninth*, thoracoplasty (Eslander's operation); *tenth*, perflation.

Which of these various methods will give the best results? As a matter of fact, as practical surgeons, we may confine ourselves to the relative merits of but two of these methods—aspiration, and free incision with drainage.

There is no question but that in a certain minority of cases in children, simple aspiration once or twice repeated, will effect a permanent and satisfactory cure.

I have the records of four such cases:

Case 1.—Charlie F., æt. 18 months; diagnosis, empyema, which was confirmed by Prof. H. A. Johnson; cured by aspiration; five ounces of odorless pus; died three years subsequently of malignant diphtheria. This patient was also seen by Prof. Waxham, and Dr. D. H. Sullivan.

Case 2.—Mamie S., æt. 30 months, treated for six weeks for chronic pneumonia by a distinguished physician; cured by one aspiration; twelve ounces of greenish pus withdrawn, very flaky; diagnosis confirmed by Drs. E. E. Babcock and T. K. Jacobs.

Case 3.—Baby, æt. 14 months; two aspirations; cured.

Case 4.—Infant (Home of the Friendless); empyema; two aspirations; cured.

Aspiration has the advantage of being simple, safe, and occasionally curative; but if we find the fluid re-accumulates, or septic symptoms are developed, then a free incision with drainage is imperatively demanded.

Aspiration has the disadvantages of leaving a small amount of pus for reabsorption, or which may become an inspissated residuum according to Abbe, that will result in a secondary abscess in after-life. Surgically considered, it is not as perfect an operation, or as scientific a procedure, as evacuation by a free incision and the introduction of a large sized drainage-tube.

Of 121 cases treated by aspiration alone, 23, or 19 per cent. were cured, six died, and the rest came to some other method of treatment, usually incision.

Incision.—Free incision, therefore, remains as the method possessing the decided advantages of complete evacuation of the purulent fluid, flakes of lymph, etc., and it moreover permits us to explore the cavity with the finger or sound and break down any septa or bands of adhesion. It permits of subsequent irrigation, if the septic nature of the fluid demands a washing out, and also gives us complete drainage.

The technique of the operation is comparatively simple; the diagnosis having been established beyond a doubt by preliminary definitive hypodermic aspiration. The field of operation is prepared in the usual manner for all aseptic operations. The point of selection for free incision and drainage is the posterior border of the axillary line in the 6th or 7th interspace, as in the recumbent position expansion of the lung tends to expulsion of the fluid at this point, although cases left to nature ordinarily point in the 5th inter-space, two inches to the outer side of the nipple. General anæsthesia is usually not required, although a few whiffs of chloroform in nervous children are of advantage sometimes. But local anæsthesia by means of the ether spray or hypodermic injections of from ten to fifteen drops of a 4 per cent. solution of muriate of cocaine answer every purpose in abrogating pain. The fold of skin at the site indicated is transfixed on a line with the upper border of the rib and incised for one and a half inches; then the intercostal muscles and pleura are divided, and as pus flows out in a full stream a large-sized rubber drainage tube is inserted and secured by safety pin, or by a button of rubber flange reflected so as to prevent its intrusion into the pleural cavity. The tube should not be more than three inches long. Irrigation should not be resorted to except in septic empyema where the fluid is fetid and caseous from bacterial decomposition.

I recently lost a patient during an irrigation with a solution of warm water slightly borated. The cause of death was probably due to a thrombus or obscure pleural reflexes causing shock.

As soon as the tube is introduced it should be covered with sublimated gauze so as to prevent entrance of septic germs, and the pus should be allowed to flow out upon absorbent cotton or antiseptic gauze, and the dressings changed daily. Strict antiseptic precautions are always necessary, and our greatly improved results and lessened mortality are due to the antiseptic treatment now employed.

Contrast the different results: Depuytren operated in fifty cases with only four recoveries, while L. Emmett Holt reports sixty-three cases operated upon under full antiseptic precautions, with only two deaths. Of this number twenty-six successive cases were operated on by Goodhart and Taylor in the Eveline Hospital, London, with only one death, and *that* from a complicating pericarditis and peritonitis. The average duration of the discharge was about six weeks. In children we are usually able to discard the use of tubes in three weeks. When close apposition of the ribs causes flattening of the tube during pressure from coughing or induces neuralgia due to pressure upon the intercostal nerve, subperiosteal resection of one and one-half inches of the single rib will afford ready relief and better drainage; although my experience has been that it is rarely required. In old empyemas in children, or when we have a chronic abscess discharging through a sinus and shortening the life of the patient by lardaceous degeneration of kidneys, liver or spleen, or from general exhaustion, Eslander's operation of thorocoplasty should always be performed, although its field of usefulness is limited; but, if necessary, a sufficient number of ribs and a section of each should be made to permit the complete retraction of the divided ends of the ribs to the bottom of the cavity, thus closing it, otherwise a fistulous tract remains requiring a subsequent operation.

In regard to Ewart's method of perflation, reported last year, I have no personal experience.

In conclusion, therefore, I may summarize my observations as follows:

1. The surgical treatment of empyema in children is eminently satisfactory, and yields better results than in adults.

2. Multiple hypodermic aspirations are necessary to perfect a diagnosis, and should always be resorted to in cases of thoracic disease about which there is any element of doubt, especially in cases of pneumonia that exceed the usual period and become "old monia."

3. Aspiration cures a small minority of cases and should always precede a more radical operation, especially in localized empyemas.

4. Free incision and drainage, with local anæsthesia, under strict antiseptic precautions, gives the most satisfactory results in the majority of cases.

5. Subperiosteal resection of the rib is sometimes necessary to afford perfect drainage.

6. Thoracoplasty is rarely required in children.

7. Other methods of treatment should be resorted to for special cases or circumstances.

8. Early incision, perfect drainage, and complete antisepsis should be the rule.

1801 State Street.

GYNECOLOGIST *VS.* GENERAL PRACTITIONER.

Read in the Section on Diseases of Women, at the Thirty-ninth Annual Meeting of the American Medical Association, May, 1888.

BY J. W. BROWN, M.D.,
OF MOTTVILLE, N. Y.

The able paper of Dr. Van de Warker upon proper methods of *instruction* leaves little to be said; but how shall we *practice* who are numbered with the rank and file of the profession, and are not so happily situated that the elegancies of specialism are obtainable? The general practitioner in the country has no sinecure. His attainments are well known, although but little from his pen appears in the journals, and he is not *invited* to elaborate pages of *theory* in the prevailing subscription treatise. His attendance at stated meetings of our various medical societies is uncertain; yet his opinions are none the less worthy of consideration, no matter how remote may be his location. With only a limited command of current literature and less time for its perusal, and with a meagre library, we find him working out these problems after methods of his own that demand recognition, even when unaccompanied by the erudition and culture of our cities.

Results are of more value to our patients, even if lacking the trade-mark of Vienna or Berlin; but how shall we obtain them? We all know to our sorrow the *magic* of the word "gynecologist" to *our patient that pays.* Imperceptibly she drifts from us. But how about the poor unfortunates who cannot afford this luxury, and whom we have with us always? To the wealthy, or those of modest means, the "private" hospital is always open, with skilled attendants, proper diet, regulated exercise, freedom from care, plenty of sleep; and, after weeks or months of special treatment, they return to us greatly benefited—sometimes (?) well, and at a cost that would wonderfully help the family physician; but *specialism is expensive*, and we therefore see the *cream* served upon the table of our brethren of gynecic renown, while we take *skim-milk* "in ours," and patiently listen to "how little country doctors know about female troubles," and are asked to wait when our modest bills are presented, as it cost *so* much for Dr. ——. In the meatime what becomes of our poor patient (her husband mayhap a laborer), with a large family? She is anæmic, with all the concomitants of typical nervous exhaustion. Does she ever get well? Is her progress any the less rapid than that of her more fortunate sister?

We all know what specialism accomplishes, and it is far from my desire to disparage it. We would indeed be in "*outer darkness*" were it not for the distinguished labors of American gynecologists. But what means shall we adopt when we cannot follow in their footsteps, not having the adjuncts at our command? Who is there in active country practice that has not some of these typical cases who can barely afford the necessities of life. We have no hospitals at our disposal, and attendants are limited to some gossiping dame whose constant chatter drives them to the verge of distraction; the food is often improperly cooked and served in a manner that may be termed brutal; the little niceties of the fastidious nervous invalid condemned as fussiness, and a spirit of fretfulness developed by constant "nagging." It is useless to extend the tale—we all know it only too well; yet are our results any the less satisfactory? Is there not a tendency among our *confrères* of gynecological renown to ignore what general medicine taught them years ago, and attend only to the *special* features as seen by them, and by *their* influence through their patients affect the majority of women by calling attention to genital disturbances and thereby magnifying them? To us that cannot afford these luxuries and have not the time at our disposal for the dilettanteism of the profession, what shall we do? With the best means within our reach, *theoretically* our work is useless. *Is it so practically?*

What will best accomplish the cure of these poor nervous invalids, with no brain lesion, yet standing upon the border of "melancholia"—starving mentally, nervously and physically? Why does insanity in country districts make such rapid progress? We who spend our lives in farming communities know too well the monotony that is the lot of our poorer patients and, when accompanied with genital disturbances, makes their lives a curse and causes us more anxiety than profit. Shall we desert them because theoretical treatment is not attainable, and financially they cannot be removed from these influences and obtain the rest of body and mind so essential to recovery? Take our specialist from his idols and where is he? We must solve this problem ourselves, and I hope the discussion may develop much that we can apply to their alleviation. In their management, the merely negative man will not succeed. Be certain of your diagnosis, "then go ahead." Obtain their confidence or else abandon the case. Respect the hyper-sensitiveness, that is always present. Do not be arbitrary, as much depends upon moral suasion. Treat all genital lesions after recognized methods, adapting to the circumstances and surroundings. We have plenty of fresh air and, with pure milk and good diet, general debility can be slowly restored. Use tonics judiciously, but the mental starvation, associated with ovarian tenderness, engorgement, neuralgia and its legion of disturbances, must ever prove the obstacle that requires our most urgent efforts to surmount.

Neurasthenia is no myth, even among the poor or in remote country places, and the difficulties of cure will ever tax our utmost resources. Regulate menstruation and the abuse of sexual gratification. Divert attention from genitals, making light of their influences. Educate the will. Teach

self-reliance. Turn their thoughts towards recovery, not hypochondriasis. Make them understand that you will assist, *not* sympathize with every imaginary ache and pain. Trust them and encourage them in their effort towards recovery; even "if they fall by the wayside," try it again. Do not encourage morbidness, for we all know the craving for sympathy that invariably persists even when partially convalescent. Avoid drugs, especially anodynes, hypnotics and opiates. Treat upon general principles, no matter if it *is* old-fashioned. It is no sign of mental decrepitude if our patient retains her ovaries intact or trachelorrhaphy has never been performed. Again repeating that, while admiring the skill and general worth of our brethren of special faith, they must always remember that general medicine is the *sine qua non* of success.

OBSERVATIONS ON YELLOW FEVER, WITH SPECIAL REFERENCE TO DIAGNOSIS, PROGNOSIS AND TREATMENT.

Read before the State Medical Association of Florida, 1888.

BY JOHN P. WALL, M.D.,
OF TAMPA, FLA.

The following remarks on yellow fever are based on clinical observations during the epidemic of that disease last fall in Tampa.

The etiology of this fever is but little, if any better understood than its pathology; and in these two points are to be found the individual characteristics, so to speak, of the disease. The idea of yellow fever being only a more malignant grade of malarial fever can only be entertained by very superficial observers, or those who have never passed through an epidemic of this fever. Notwithstanding this broad assertion it is not by any means easy, nor in fact always possible, to determine whether any single case is yellow fever or not; and this is especially the case at the inception of an epidemic. To arrive at a conclusion on this point quite a number of circumstances in connection with the case, apart from the symptoms, have to be taken into consideration; and then, reasoning by a process of exclusion, we may be able to approximate, at least, the probable truth. The recent history of the patient as to being exposed to infection in another place, on board ship or otherwise, and whether or not the patient has had a previous attack of this specific fever, are circumstances of the first importance to be taken into consideration. Though the patient may be from an infected place or have been otherwise exposed to the infection, yet if it can be positively established that he has had yellow fever, the probability of his having a second attack is so unlikely and remote as to warrant the exclusion of the yellow fever hypothesis in arriving at a diagnosis. But where the patient has recently been exposed to infection and possesses no immunity acquired by a previous attack from this specific fever—in other words, is not acclimated—then, in such a case, there is a probability of its being yellow fever, and advantage should be taken of the doubt and the case managed as a case of yellow fever without waiting for a positive diagnosis. The management of such a case consists in the complete and thorough isolation of patient and attendants and, on the termination of the case, the prompt institution of measures for efficient disinfection of everything, even to premises, that might have been contaminated.

In its symptomatology yellow fever presents no well-marked indications of its true character in the beginning; nor, for that matter, at any time in mild cases, during its progress. Its attack is generally ushered in by a chill or chilly sensation, as in most other fevers and the pyrexiæ. With the rise of fever there is generally intense frontal headache, with pain in the small of the back and extremities, especially the legs. A feeling of tiredness in the legs, with a sense of general prostration, is usually experienced. Nausea from the beginning is not an uncommon symptom, though not always present. Incessant nausea with much retching or vomiting, during the first exacerbation of fever, indicates the case to be of a severe type. The tongue is generally coated with a white or whitish fur, is sometimes enlarged, and almost invariably presents red edges on the sides. The temperature for the first three days may range in different cases from 102° to 106° F., with a slight morning remission in the majority of cases. The pulse for the first three days may range in different cases from 90 to 110 per minute, though not so frequently above as below 100 beats per minute.

The skin is generally burning hot, rarely dry, and not unfrequently bathed in profuse perspiration. In many cases, after the fever sets in, the extremities remain cool, while the body heat is intense and pungent. And it is in this class of cases where mustard pediluvia or mustard sitz baths have been found so useful and beneficial in restoring the eqilibrium of the circulation, as to render the mustard bath an almost universal remedy in the beginning of treatment. In severe cases albumin will be found in the urine on the *third* day, as a rule. Its presence is always a grave symptom, but as it is rarely—never in my observations—to be detected before the third day, it is impossible to determine up to that time whether the case is to be of a mild or grave type. In all cases where albumin is not present in the urine on the third day or at the expiration of seventy-two hours from the inception of the fever, the case will, as a rule, prove to be of a mild type, and the patient and friends can be assured of a speedy recovery if great prudence in eating and drinking is exercised for two or three days more.

And just here it is well to distinctly emphasize the fact that it is the acute parenchymatous nephritis, as indicated by the presence of albumin in the urine on the third day, which is the most marked characteristic of the graver type of this fever, and without which the icteric hue of the conjunctivæ and skin is rarely, if ever, developed. But it must be borne in mind that by no means do all cases of this fever, as it presents itself in this country, have albumin in the urine. And it is the presence of albumin in the urine on the third day, subseqently followed by the icteric hue of the conjunctivæ and skin, by which this fever can be positively diagnosticated. These two symptoms—albumin in the urine and the icteric hue—at the proper time and in proper sequence, render the diagnosis of yellow fever as positive, from a scientific point of view, as it is possible to diagnosticate any other disease by physical symptoms.

The later writers and authors speak of albumin appearing in the urine in yellow fever, but fail to indicate at what time or stage of the disease the albumin is to be found; and they also fail to say that it is not present in all cases—two facts of the first importance. In the *London Lancet* of March 17, 1888, Dr. Robert Lawson, Inspector-General of the British Army, who had served in Jamaica, says: "On the evening of the third day, or morning of the fourth, the urine generally presents traces of albumin," thus confirming my observations as to the time when the presence of albumin in the urine may be expected. He fails to state, however, that albumin is not present in all cases of the fever, a fact of the highest importance in eliminating much of the confusion in regard to the diagnosis. In mild cases, where no albumin is found in the urine on the third day, the fever will terminate on the expiration of seventy-two hours, sometimes earlier, not to return, and the patient will progress to rapid convalescence without further trouble.

Yellow fever is generally described by authors as a fever of one paroxysm of seventy-two hours' duration, followed by a stage of apyretic calm of variable length, from one to twelve hours, and this is succeeded by the recurrence of fever of more or less intensity, accompanied with nausea and vomiting of white glairy mucus at first, then flecked with dark specks and shreds, which have been compared to bees' or butterflies' wings, finally terminating in the coffee-grounds-like black vomit. Now, as a rule, all of this is true of typically bad cases, but this secondary fever and nausea are very rarely to be met with in mild cases devoid of albumin in the urine on the third day. And in all cases in which there is no nephritic complication, as indicated by the absence of albumin in the urine, yellow fever ends on the third day, or perhaps earlier, convalescence practically sets in and recovery is soon complete.

Thus it will be seen that practically there are two types or grades of this fever to be met with in an epidemic—one whose main feature is an acute parenchymatous nephritic complication developed by the third day; and the other which, having no such complication, ends with the first paroxysm of the fever and almost invariably terminates in speedy recovery, the patient being up and about as early as the fifth or sixth day. Not so, however, where albumin is detected in the urine on the third day; for while, in this class of cases, the high fever of the first three days may subside, and the pulse rate return to the normal, or even fall much lower, and the temperature be anywhere from 97° to 104° F., the patient still continues in a most critical condition, and not unfrequently so remains for an indefinite number of days. In some instances the temperature and pulse are normal, and so remain after the subsidence of the first paroxysm of the fever; but there are plenty of indications, and especially the albumin in the urine, to show the serious condition of the patient. It is doubtless this class of cases to which relapses are attributed by a certain class of physicians who are always trying to explain away why they failed to cure all their cases of yellow fever.

The amount of albumin in the urine varies in different cases, ranging from 5 to 75 per cent. of volume of the total amount; and, as a rule, the greater the amount of albumin, the more serious and less hopeful may be considered the prognosis. In these nephritic cases the eyes begin to show the icteric hue on the fifth day, and on the sixth or seventh day the skin begins to turn yellow. In rapidly fatal cases, terminating as early as the fourth or fifth day, the yellow hue appears earlier and is always well-marked after death. The yellow color which is characteristic of this fever in its worse and most fatal type, and has given the fever its name, is very rarely indeed, if ever, present in cases unaccompanied by the nephritic complication. This is repeated because it is a most important fact to remember.

Hæmorrhages from mouth and nose are not infrequent in the severe grade of cases having the nephritic complication. The urine may be tinged with blood, imparting to the coagulated albumin a dark color, but hæmorrhage from the urinary organs is seldom profuse; and as these hæmorrhages never occur in the paroxysm of the fever of the first three days, and only in cases with the nephritic complication, there should never be any trouble in differentiating yellow fever from hæmorrhagic malarial fever. The eyes become blood-shotten in no inconsiderable number of cases. Epistaxis and bleeding from the gums are the more common forms of hæmorrhage met with in this fever, and the nose-bleed is often alarming. Among females passed puberty, more or less uterine hæmorrhage is almost certain to occur during the course of the fever, making its appearance

from the third to the fifth day. Even in mild cases this uterine hæmorrhage is rarely absent—and by mild cases are understood those without the nephritic complication.

The icteric hue of conjunctivæ and skin has very much the appearance of ordinary jaundice, though it is hardly likely that it is produced by the same cause—retention of bile in the blood—for the reason that bile is not very frequently found in the urine, as is universally the case in ordinary jaundice. One of the tests for bile in the urine is to add albumin and precipitate it with heat and an acid, when the coagulated albumin will assume a greenish color, imparted by the presence of biliverdin. In cases with the nephritic complication the albumin is already present in the urine, but it is only occasionally that the precipitated albumin assumes the greenish color of the biliverdin. From the time the yellowness of the skin becomes fully developed until it begins to fade, the capillary circulation is extremely sluggish; so much so, in fact, that firm pressure on the chest with the open and separated fingers leaves their marks on the surface for a number of seconds if not a full minute. Judging from the tendency to hæmorrhage and the capillary stasis which are such prominent features in severe cases of this fever, and taking into consideration the absence of bile in the urine in the large majority of cases, the conclusion is highly probable, if not positive, that this yellowness must be mainly dependent on pigmentation of the eyes and skin by the coloring matter of the blood, instead of being occasioned by the retention of bile in the blood—as in ordinary jaundice—as is generally supposed and believed.

Suppression of urine, or a very scant secretion more or less tinged with blood, only occurs in the third stage of the fever; rarely, if ever, during the paroxysm of the first three days. And it is only in this graver type of cases, with the nephritic complication, that suppression of urine takes place, to be followed by spasmodic twitchings, stupor, convulsions and death. These muscular twitchings are especially noticeable about the face. These nervous phenomena are supposed to be the effects of uræmic poisoning as a result of non-excretion of urea by the kidneys and its retention in the blood. But be that as it may, their occurrence is almost a certain prelude to a fatal termination, and in a prognostic sense is as bad, if not worse, than the black vomit. Hiccough is never met with in the first fever, *i. e.*, before the fourth or fifth day, and is a symptom of the most unfavorable import.

The injected and watery eyes, swollen face and anxious countenance so generally depicted by writers on this fever, may be noticed in a large number of cases, probably the majority. The detection of albumin in the urine on the third day of the fever and the subsequent icteric hue of eyes and skin, establish the diagnosis of the fever beyond all doubt. But as before pointed out these two symptoms are absent in mild cases—those unattended with the nephritic complication—and hence the frequent disputes and contentions as to diagnosis in the beginning of an epidemic. The duration of the paroxysm of the fever for only seventy-two hours, or even perhaps a shorter time, and its abrupt termination without the use of quinine, should excite, however, grave suspicion of its character; and this suspicion will be greatly strengthened if the chill come on in the night, and especially in the latter half of the night. Dengue is the only other fever of our climate which may be ushered in by a chill at night, but its symptoms are too well marked—besides being a proverbially non-fatal disease—to admit of its being mistaken for yellow fever, or, *vice versa*, yellow fever being mistaken for dengue, by any one but the merest tyro in the profession—especially after a few days study and observation.

This brevity of the first paroxysm of yellow fever in mild cases, the subsidence of the fever without the use of quinine, the severe frontal headache, with pain in the back and extremities, and the absence of a second paroxysm of fever, taken with the appearance of the eruption on the extremities associated with dengue, will rarely fail to indicate to the experienced physician the true nature of the case. Many yellow fever patients emit a peculiar odor which the experienced physician has no difficulty in recognizing, though he may not be able to describe it by comparing it to any similar smell.

The matter of early diagnosis is a most important one in our Southern cities and towns as it is generally conceded, and my own experience tends to confirm this view, that if the first case (or cases) is recognized and proper measures of isolation and disinfection are instituted an epidemic may be prevented, especially in places whose atmosphere is not vitiated with miasmatic exhalations from accumulated filth. Hence the importance of ever being on the alert and carefully investigating any and every case of fever that comes under observation during the season when the fever usually prevails—the summer and fall of the year.

Daily observations should be made for the detection of albumin in the urine from the first to the fourth day, and if its presence is denoted on the third day the diagnosis is probable, and if on the sixth or seventh day there appears the icteric hue of conjunctiva and skin the diagnosis is positive. If the case is mild, however, but with the severe frontal headache and other symptoms already detailed, and abruptly terminates on the expiration of the third day, though no albumin may have been found in the urine, the diagnosis of yellow fever is only problematic, but the benefit of the doubt should be given to the community and all necessary precautions taken to prevent the increase and spread

of the infection. Of course the previous history of the patient, as to the probability of his having been exposed to the infection, and as to his ever before having had yellow fever, should be duly investigated.

As to treatment little need be said, as, unfortunately, so far no specific treatment has been found. The mild cases of the fever—those destitute of the nephritic complication—will, as a rule, get well spontaneously, with or without treatment, and it is probably because of the failure to recognize the two types of this fever pointed out in this paper that so many different remedies have been vaunted and then laid aside, and so much been said of different epidemics differing in their phases, and of remedies effective in some epidemics and futile or useless is others. The main indications are to restore the equilibrium of the circulation by mustard pediluvia or baths, evacuate the bowels with some efficient though mild purgative, and control the febrile excitement by the use of antipyretics—antipyrin and antifebrin. So far as my experience goes mercurials do not appear to possess any special advantage, except possibly that the stomach is not so likely to reject them as it often does more bulky drugs. Doubtless the common, though possibly erroneous belief that yellow fever is only an intensified form of bilious fever, and that the icteric hue is dependent on the same cause as that producing jaundice, and hence the fault laid to the liver, has always attached more importance to the use of mercury in the shape of calomel in this disease than experience justifies. Castor oil, or the more common salines, will be found about as good evacuants of the *primæ viæ* as anything else. Quinine is a useless drug in yellow fever unless there is some evidence of a malarial complication. It may be advantageously used during convalesence, but it is perfectly valueless in controlling the disease. Administered in mild cases, which would naturally recover, quinine often has received the credit of having cut short the fever as a *post hoc propter hoc* conclusion. The refraining from its use, even in mild cases, is advantageous in a diagnostic point of view, for if the fever spontaneously terminates by the end of seventy-two hours, or earlier, the presumption is against it having been of a malarial type. Antipyrin in 10 grain doses every three hours appears to have a very beneficial effect in reducing temperature, promoting diaphoresis, and relieving headache and other pains. Its advantages over antifebrin are its analgesic properties and greater solubility which renders its administration by enema in 20 or 30 grain doses almost as efficient as when administered *per os*. And this method of administration sometimes becomes necessary on account of nausea and excessive irritability of the stomach. The use of opiates is always hazardous, unless there was some way of determining anterior to the third day that no nephritic complication would be developed, as their tendency is to induce suppression of urine. Of course in mild cases in which there is no albumin in the urine it is not certain that their use is hurtful, but the difficulty as to their use arises from our inability to determine this very important point as to the nephritic complication; and hence the safe rule is to eschew the use of opiates entirely in the treatment. An occasional exception to this rule may be made in cases presenting other complications and where the kidneys are not, or only slightly, affected.

As to food and drink, the less taken the better, so as to keep the stomach as quiet as possible. Cold drinks are decidedly injurious in the great majority of cases. Hot drinks are borne much better, and hence, doubtless, the common practice of administering lemon leaf and other teas. Possibly the benefit derived from these hot drinks is dependent on their constringing effect on the capillaries of the mucous coat of the stomach, on the same principle that injections of hot water are used in gynecology. For nourishment a tablespoonful of equal parts of milk and lime-water may be given every two hours, though if the patient is not naturally feeble "Tannerism," or starvation, may be practiced.

In the graver type of cases with the nephritic trouble, no line of treatment after the third day, promises any certainty of success. So long as the quantity of albumin in the urine remains comparatively small and the kidneys continue to act tolerably freely there is encouraging hope of the patient "pulling through," though there is no means of telling when or how soon the action of the kidneys will become fatally impeded or suppressed, and the case terminate in stupor, convulsions and death with or without black vomit toward the end. It is in this class of cases that we are constrained to recognize the impotency of our art and our utter helplessness in the presence of this dread disease. In this latter stage the tincture of digitalis in 10 to 15 drop doses every two or three hours may prove of some advantage as a heart tonic and diuretic. Of course, alcoholic preparations are indicated to sustain the flagging vital powers; but, unfortunately, like a great many other remedies, disappointment is only too frequently the result of their use. In the mild cases without the nephritic trouble alcohol is rarely indicated, it may be occasionally indicated in the nephritic cases where the quantity of albumin is small and the kidneys act fairly well, while in the worst grade of cases, it, like everything else in the way of remedies, is likely to prove of little avail.

No remedies proved specially useful in relieving nausea and hiccoughs. Cocaine was tried without benefit. Carbolic acid in small doses proved a failure. In fact nothing but as complete abstention as possible from food and drinks appeared to do any good.

NOTE.—These observations are based upon 130 cases that I have treated myself, in which the urine was tested, besides seeing a large number in consultation where the urine was examined also. Dr. J. Y. Porter, who was here during the epidemic and had charge of the Fever Hospital and the Government relief measures, admits that his observations tally in the main with mine.

THE FORMATION OF AN ARTIFICIAL URETHRA FOR PROSTATIC HYPERTROPHY.

Extempore Remarks before the Medical Society of Virginia, Wednesday Evening, October 24, 1888.

BY HUNTER McGUIRE, M.D.,

EX-PRESIDENT OF THE MEDICAL SOCIETY OF VIRGINIA; SURGEON TO ST. LUKE'S HOSPITAL, RICHMOND, VA.

After relating a case in which members of the Society were personally interested, Dr. McGuire said that this is the way that men usually die (by surgical kidney) who have serious obstruction to the passage of urine. In both sexes, and at all ages, mechanical obstruction to the passage of urine from the kidney ends in cystitis, ureteritis, pyelitis and pyelo-nephrosis. Obstruction may be due to stricture, enlarged prostate, tumor, stone, etc. It ends sooner or later in surgical kidney.

A very common cause for this is an enlarged prostate. This comes on after the age of 55 years. As far as Dr. McGuire's experience goes, if a man escapes this trouble until he is 63, he is not apt to have it. We all know how common it is in old men—so common that he sometimes wonders that it was not included in that wonderful description of old age found in the last chapter of Ecclesiastes. Possibly senile hypertrophy did not belong to that period; but is one of the results of so-called modern civilization. We don't know. We only know that hypertrophy of this gland is, with rare exceptions, peculiar to man. The prostate is a curious body; it is made up of fibrous, glandular and muscular tissue. It would be as well, if not better, to call it the prostatic muscle, than to call it the prostatic gland. It supports the bladder, which, otherwise, is so lightly and so feebly held in its position. The erect posture which man assumes puts a great strain on this body. Indeed, this might be used as an argument that it was intended for man to go on all fours, like the quadrupeds.

When deterioration of all the tissues begins—that is, about 55 years of age or more—this structure may commence to get bigger; it may enlarge toward the bowel, and do little or no harm. But if its growth encroaches in any way on the lumen of the urethra, then trouble begins. Put your finger into the patient's rectum, and you may find the prostate greatly enlarged; and yet the man may have no evidences of urinary obstruction. And, on the other hand, the finger may reveal to your sense of touch no increase in the size of the gland; and yet there may exist marked prostatic obstruction. There may be new growths, tumors, true myomata which can be only felt by the finger in the bladder. The enlargement may be either centric or eccentric. You cannot reckon the extent of obstruction by the mere size of the gland felt through the rectum. All this depends upon the direction of the growth. Let it encroach, even slightly, upon the urethral canal, and lessen its size, and there soon follows irritability of the bladder, retention of urine, cystitis; and if this goes on, pyelitis and pyelo-nephrosis.

Dr. McGuire saw before him, as he was making these remarks, which he certainly did not intend to make, and for which he was entirely unprepared, many gray headed men who are listening to him with great attention. Some of you "old Fellows" may already know that your prostates are getting larger than they used to be; that it takes you a little longer to make water now; that it is slow to start; that the stream is not sent as far from your body, but drops down between your legs, which you keep wide apart to prevent your trowsers from being splashed. He advises you to try to empty the bladder every time you urinate, and not leave in it some residual urine which will decompose, just as it would do in a dirty chamber-pot, and afterwards set up in your bladder irritation and inflammation. Take care also to keep your body, and especially your feet, dry and warm. Don't sit on a cold stone or a wet saddle. Keep your bowels open, and let whisky alone. If the enlargement goes on increasing, and the calibre of the urethra is more and more diminished, more prominent and urgent symptoms are presented. Sudden retention of urine may occur, requiring the use of the catheter; or (and this is just as frequent) the patient will tell you that he cannot hold his water; that he has incontinence of urine. This condition generally means that his bladder is distended with urine, and overflowing; and the catheter is required here to relieve the over-distension. It would be out of place for him to talk about antiseptics and germs now. But it is not out of place for him to beg you to keep your catheter clean. A dirty catheter is a very dangerous instrument.

After a longer or shorter time, this enlarged prostate forms a dam at the outlet of the bladder, and only the water above the level of the dam escapes during micturition. Some urine, which is called "residual urine," is always left in the bladder. This decomposes, becomes ammoniacal, is an irritant and sets up cystitis. The poor sufferer strains violently to make water. This tenesmus of the bladder provoked by the obstruction, injures the vesical end of the ureters. These

tubes become involved, and the disease extends to the pelvis of the kidney, and presently to the kidney itself. Try to prevent this cystitis if possible. You may know that it is coming on by the irritability of the bladder; by the frequent calls to micturition; by his telling you that he never feels "like he is done" when he makes water; by his sense of weight, fulness and discomfort about his bladder, and by the other symptoms that have been mentioned. It is not worth while to try drugs of any kind, or dilatation by bougies to lessen the size of the prostate. Dr. McGuire has spent a good deal of time and money in endeavoring to reduce the gland by electrolysis. In his hands it has done no good. The only good you can do is by using the catheter—a clean gum catheter—letting the dirty residual urine escape, and, if need be, by washing the bladder clean with hot water. At the same time, you must attend to his general health and modes of life. Very often in this way the man will go on for months very comfortably. Sometimes the enlargement, if it be due to simple congestion and irritation, will pass away under this course, and the parts will be restored to their normal state. But if the enlargement be due to a true fibroma, or myoma, or if the hypertrophy be diffuse and fixed, then you may be sure the trouble will increase, and you will soon come to a period when palliation is no longer possible, and you must resort to operative measures.

It is wonderful how long a man may use the catheter, and the bladder retain its power of expelling the urine when you make a free opening into that organ. One of Dr. McGuire's patients has used the catheter for three years, never once in all of that time passing a drop of urine through the urethra without the aid of an instrument. As soon as an artificial urethra was made for him he could send the urine in a steady stream three feet from his body. In this case, the prostatic obstruction was so great that he often spent half the night trying to get the catheter into his bladder. When his bladder was opened, and the finger introduced, it was found that long-continued vesical tenesmus had pushed a part of the bladder down behind the prostate, making a pouch or cul-de-sac there, two inches deep; and in this pouch, what had not been suspected, a large prostatic stone. Dr. McGuire had sounded this man repeatedly for stone, and had not found it. A very short time afterwards another man was brought to his hospital—a poor old preacher who had been in bed for seventeen months with fearful cystitis from prostatic hypertrophy. He, too, was sounded as carefully as possible for stone, but none found. When his bladder was opened to make for him an artificial urethra, the first thing felt by the finger was a stone down in a pouch behind the prostate.

Dr. McGuire has operated for stone in the bladder, one way or another, 150 times or more, and this confession seems a strange one; but it is nevertheless true, and he believes before he operated in this way for prostatic hypertrophy that he has overlooked more than one case of stone in the bladder in such subjects. The first one of the patients referred to was one of the cases in which he had tried electricity, using an intense current after Apostoli's plan. When he put his finger through the bladder on this prostate, which was literally as big as his fist, and had, along with this general hypertrophy, numerous large and small, hard nodular growths or tumors on its vesical surface, he felt how idle had been his effort to do any good in this way; and he has put out of sight and out of reach his expensive prostatic and vesical electrodes. If after what he has said about them, any Fellow wants them to try, he will cheerfully give them to him.

After you have exhausted the use of the catheter and palliatives generally, you must open the bladder and let the urine drain away, and give to the bladder and to the man, too, a rest which both sadly need. This is the only way by which you can possibly cure the cystitis and prevent disease from reaching the kidney. It is the only way by which you can stop the pain, or lessen the size of the prostate, or restore that man to anything like his normal condition. Now, how to do this?

The first time Dr. McGuire operated for stone by the supra-pubic method, he was struck with the fact that the bladder contracted as soon as an opening was made in its anterior wall, with a force sufficient to drive out every drop of liquid it contained, and that there was no more need for drainage tubes after supra-pubic cystotomy than there was after perineal lithotomy. The bladder is not an inactive bag, as you would expect to find it in a dead or paralyzed body. Its walls contain elastic and muscular forces which, in the natural state, are resisted by the same kind of structures at its outlet. But when an artificial opening is made in the bladder at any point, the muscular and elastic tissues in the walls of the organ contract and keep the viscus empty of any fluid. Recognizing this fact, he abandoned drainage tubes after supra-pubic cystotomy, as after many years we all were led to do after perineal section for stone. It was this principle that had led him to attempt the formation of an artificial urethra for prostatic hypertrophy.

The operation is very simple. You inflate the rectum with a rubber bag, which pushes the bladder up above the pelvic brim. Inject the bladder with water to make it prominent. Cut in the median line through the skin and superficial fascia from the symphysis pubis to a point three inches above. Separate, with the handle of your knife, the recti muscles. Cut through the transversalis fascia upon a grooved director. With the handle of the knife go through the fat and

loose cellular tissue in front of the bladder. Catch this organ, now exposed to view, with a tenaculum, and open it with the point of your knife. Carry your finger into the bladder, and examine it. Open the bladder as low down as you safely can—not higher than the top of the pubes. Let the water out of the rectal bag and remove it. The bladder will then fall back into the cavity of the pelvis. Take one or two stitches in the lower part of the wound through the skin. Don't include the muscles in your sutures. When completed, the opening in the bladder should be as low down as you can get it, and the opening in the skin at the upper end of the incision.

For several hours, to permit the wound to glaze, and for the sake of cleanliness, he uses a large drainage tube through this track. Keep the urine acid, for acid urine is aseptic, and this is the nearest approach you can get to antiseptic dressing in cystotomy. The urine will drain through the wound as fast as it is formed; and if all goes well for two or three weeks, the opening will be reduced to a fistulous track which will admit a good size bougie, say a No. 10 or 12, American scale. Now the man will begin to urinate through the fistula at will. He can retain the water two, three or four hours, and in one of his cases as long as six hours, without dribbling, and pass it when he desires. The fistula does not leak, no matter what may be the position of his body, unless he contracts his bladder to make water, or the urine accumulates to a point above the level of the top of the fistula. If the operation is properly performed, the fistula should be from 2½ to 3½ inches long, and occupy the same relation to the bladder that the spout of a coffee pot does to the pot.

The operation is so simple, comparatively so free from danger, involves no important blood-vessels nor nerves, is made at a safe distance from the peritoneum, and requires for its execution only a knife, a pair of forceps, tenaculum, and grooved director. Indeed, if carefully done, he has found it so safe that he does not hesitate to perform it in cases of diseases of the bladder where the diagnosis is difficult or impossible, simply that he may explore the bladder. If a laparotomy for diagnostic purposes is justifiable, the much less hazardous undertaking of making a supra-pubic cystotomy for the same purpose is certainly so. You will at least do this good: Drain the bladder and put it at rest, which in cystitis is worth more in one day than any drug or set of drugs would be worth in a month. It is astonishing to see how soon the patient begins to improve after the opening is made. The urine soon becomes free from mucus, pus and blood, which it formerly contained in such abundance. The vesical tenesmus and irritability rapidly pass away.

In one of his cases, a man 69 years old, so feeble that he could, unaided, barely walk across the room, and reduced almost to a skeleton, in six weeks fattened fifteen pounds and could walk two or three miles without fatigue. This man got out of bed in sixteen days after being cut, and soon afterwards went about his business, wearing over the opening, to prevent chafing, a bit of absorbent cotton.

In his cases, Dr. McGuire had had, for the first two months, no trouble to keep the artificial track open. If the obstruction at the neck of the bladder is great, you need not expect the fistula to close at an early day, even if you introduce nothing into it. But at the end of about eight weeks, the prostate will diminish in size, all congestion and inflammation will disappear, and Nature will now make an effort to send the water through the natural urethra, and close up the artificial one. In the case just referred to, at the end of the eight weeks the man got up one morning, made an attempt to pass the urine through the artificial track, which was temporarily closed by a clot of mucus, and to his surprise, found the urine passing through the natural urethra. This was the first water he voided in that way for more than three years. Another interesting fact in regard to this patient: For the first time in ten years he has had a return of some sexual desire and power. All this goes to show the improvement which has taken place about the neck of his bladder. But at the end of eight or ten weeks the track must be kept open by the daily use of bougies, or by the introduction of a silver or a hard rubber plug as long as the artificial urethra, and about the size of a No. 8 or 10 American scale bougie. This should be kept in an hour or more every day.

NEURALGIA OF THE LINGUAL BRANCH OF THE RIGHT TRI-FACIAL NERVE.

Read before the Medical Society of the District of Columbia, May 23, 1888.

BY SAMUEL C. BUSEY, M.D., LL.D.,
OF WASHINGTON, D.C.

Mrs. A., æt. 63, has suffered for seven years with a painful affection, which she describes as follows: Six years ago, while residing in the State of Florida, after much reading aloud for several weeks, she was seized with an acute paroxysmal pain, beginning at the root of the tongue and extending along its right border to the tip. At first it came in quickly recurring flashes of momentary duration followed by longer or shorter intervals of complete freedom; but as the time passed the painful periods became more frequent, and the paroxysmal pains increased in duration and intensity until, finally, these periods would last for several hours, during which the pain would come and go. The first attack began in the autumn and continued until spring set in.

No method of treatment, either by local applications or internal medication, afforded any relief. Hypodermatic injections of ½ grain of morphine failed even to mitigate the suffering.

During the six succeeding years, in the early autumn, with the beginning of the first cold snap, her suffering had commenced only to terminate with the coming of mild weather of returning spring. After the attack was over last spring she abandoned Florida as a place of residence, passed the summer in the North, and came to this city early in the autumn of 1887. As usual, during the past summer she was entirely free from pain and enjoyed her accustomed good health. In the month of November last, during an inclement day, whilst in a green-house, she felt the first twinge of pain along the right border of her tongue, which came and disappeared in less time than it took to tell of it. It, however, followed the course of the previous seizures, continuously increasing in frequency and intensity.

On December 10, I saw her for the first time. I found a lady of marked intelligence, with a bright and cheerful disposition, remarkably well-preserved, and with a history of unusual good health throughout her life. Her appetite was good, bowels regular, and habits of life regular and suitable for one of her age. There was no circumstance of life or physical infirmity with which her suffering could be associated in the relation of cause and effect beyond the facts stated by the patient and elicited by examination. During this interview, whilst narrating the history of her case, she was seized with the usual pains, sometimes at intervals of one and then of several minutes, which varied in duration from a few seconds to a minute or more, and in acuteness from a mere passing flash to momentary agony, which would be exhibited in distortion of the face expressive of great suffering, followed, as it suddenly ceased, with the returning smile of relief and the utterance of the words "gone again." These paroxysms of pain far most frequently began at the base of the tongue and darted along the right border to the tip; but sometimes one would began at the distal end of the right anterior dental branch of the fifth pair; another in the inferior dental, behind the angle of the lower maxilla; then one would seem to start from numerous points on the right side of the face; but wherever the locality of beginning the pain always reached its maximum intensity and remained longest along the course of the right lingual. During pain conversation was always suspended, because of inability to articulate. Sometimes the interruption of speech would begin with the utterance of the first or second syllable of a word. The cessation of the darts, pangs and longer paroxysms of pain was as sudden as the onset, beginning without warning and ceasing at maximum intensity. There was no oscillation with gradual increase in degree and gradual decline to ease. During the periods of painful seizures, which included several or many momentary or longer paroxysms of pain, the right buccal cavity became very dry, and the tongue was thickend and dry along the right border. During sleep the periods recurred less frequently and did not continue so long. There were fewer pangs or paroxysms of pain, but they were equally intense and sudden in onset and cessation

The seizures were induced by conversation, drafts of air upon the right side of the face, by surprise, the unexpected entrance of a person into her room, a quickly spoken word by one not engaged in conversation with her, a startling noise, falling temperature or inclement weather, by attempts at chewing on the right side, by efforts to swallow liquids—unless the fluid was confined to the left buccal cavity—by every attempt to masticate and swallow bread or potatoes, and by every movement of the tongue which approximated it to the roof of the mouth. Meats could be chewed on the left side of the mouth and swallowed with facility and ease. I attempted, without success, to produce pain by pressure, rubbing and pricking the right border of the tongue and buccal surface, by jarring the upper and lower teeth on the same side, and by pressing, pricking, rubbing and pinching the external surface. Every attempt to produce artificially any condition similar or apparently identical with the current circumstances, before recited as exciting agencies, failed to induce a fleeting pang or paroxysm. For instance, the attempt to chew food on the right side would quickly induce pain, but the striking of the crowns of the teeth with a piece of metal or the pressure of the finger upon them failed. The movements of the tongue in articulation would, but the enforced movements of the organ would not excite pain.

The patient felt convinced that she was the victim of an incurable disease. All medication had failed; in fact, in very many instances she felt that her suffering had been increased by efforts to cure. She had tried a change of climate, place of residence and broken up a long established routine of life without securing relief. The pain began with the autumnal fall of temperature and departed with its rise in the following spring. Season seems to have been the constant and unfailing etiological influence. All the other circumstances and conditions were ineffective except during the season of inclement weather and low temperatures. The fluctuations of temperature, and sudden falls occurring during the seasons of rising and high temperatures, even when associated with inclement weather did not produce a period of suffering or even a paroxysm of pain. I advised the lady to have prepared a protector to cover the entire right side of her face, and suggested the trial of electricity.

My second interview took place December 14. She had kept the side of her face protected with a soft warm pad, lined with silk, but the periods of suffering had increased in frequency and duration, and the pains had increased in intensity. I then advised the application of a 4 per cent. solution of cocaine along the course of the right lingual nerve. The next day she expressed the opinion that the applications of cocaine had diminished her suffering, in that the periods of painful seizures had been shortened. I advised its continuance and ordered a mixture containing the salicylate of soda with the oil of gaultheria. This treatment was continued for one week without satisfactory results. I then advised the continuous use of morphia sulphate in 1/8 grain doses, to be repeated at such longer or shorter intervals as might prove necessary to control the pain. The lady very reluctantly consented because she had lost faith in drugs, and was averse to the use of morphia. She did not follow the method of treatment very assiduously, but sufficiently so to obtain very marked relief. The months of January and February were passed in comparative comfort. With the returning mild weather of spring, the pain, as during the six previous seasons, entirely ceased. The best that can be said is that she suffered very much less than during the same season of either of the previous six years, but a cure cannot be claimed.

Perhaps, a more decided result would have been obtained if the plan of treatment had been more diligently employed.

The history of the case points very clearly to season as the predisposing and determining cause. In this particular there is nothing peculiar. But the curious array of accidental and incidental conditions which would produce longer or shorter periods of paroxysmal pain is certainly surprising, if not unique. Then, too, the paroxysms would recur during sleep, when the incidents detailed could not occur, either singly or concurrently. This fact also points to season as the predominent etiological factor.

Peripheral irritation produced by the movements of the tongue in speech, mastication and deglutition, and certain articles of food was a frequent and direct exciting agency in bringing on pain. Emotional conditions, such as surprise and the unexpected presence of a person, were equally effective. During sleep these influences were in abeyance and the paroxysms recurred much less frequently, but with equal severity. Sudden falls of temperature and inclement weather, during the autumn and winter seasons, even though the patient remained in-doors during such atmospheric changes, would also induce attacks.

The initial attack began under like conditions and circumstances for seven successive years, and followed the same course, the paroxysms gradually and continuously increasing in frequency, duration and intensity during the autumn and winter seasons, and ceasing abruptly with the beginning of spring-weather. The pain was always limited to branches of the right tri-facial, but the point of beginning varied. Far most frequently it began at the base of the tongue and was limited to the right lingual branch. When beginning at other points it was expended along the course of that nerve.

CANCER OF THE INTESTINE.

Read before the Medical Society of the District of Columbia, May 23, 1888.

BY G. WYTHE COOK, M.D.,
OF WASHINGTON, D. C.

C. H., a mulatto woman, married, æt. about 38 years, was first seen by me on November 11, 1887. She gave the following history: She has always suffered more or less at her menstrual periods. About six years ago she had a miscarriage, since which time she has not been pregnant. Has suffered for a number of years from hæmorrhoids. Of late has had much pain in defecation. During last March she noticed an enlargement of her abdomen, and in May following her physician made a vaginal examination and introduced a sound into the uterus. Since that time she has not menstruated. She has been under the care of several physicians, but has continued to grow worse. She has been taking morphia and belladonna in suppositories to relieve her pain. She is now much emaciated and has had a diarrhœa for several days, her temperature is 102°. There is a fluctuating tumor just above the pubis and extending entirely across the abdomen. It is very painful to touch. Vaginal examination shows the uterus enlarged and fixed, but the examination is unsatisfactory, owing to the pain produced in the manipulation. No positive diagnosis was made, but medication was directed to the control of the diarrhœa; this was partially successful after a few days' treatment. A large hæmorrhoidal tumor, about an inch in diameter, was now protruding and caused much suffering. To relieve this the tumor was injected with carbolic acid and glycerine with most satisfactory results. The hæmorrhoid disappeared entirely and the patient expressed herself as much more comfortable than she had been for a long time.

After this the diarrhœa was pretty well controlled, and less morphia was necessary to soothe her pain, but there was no change in the abdominal tumor. A few days later I was told that a profuse diarrhœa had set in, and the discharges were described as being of a slimy, pasty character. I found the tumor much reduced in size, and I at once concluded that it was a subperitoneal abscess, and that it had discharged through the

bowel. From this time there was continued diarrhœa for four or five weeks, with temperature ranging from 100° to 103°, with a general typhoid condition. After this there was relief of the diarrhœa for a time, but the temperature continued elevated and abdominal tenderness persisted, notwithstanding the free use of counter-irritation and opium. The tumor seemed to fill up again and presented very much the same general characters that it did at my first visit. I was never able to make a thorough examination, owing to the great suffering produced by any manipulation of the tumor. There is nothing special to say regarding the progress of the case, other than that the patient steadily grew worse, with great pain in the lower part of the abdomen and pelvis and much intestinal disturbance. Her appetite was remarkably good, and she ate an egg and some bread and butter the day she died. This occurred on the 21st of April, 1888, from exhaustion. Several times during my attendance upon the case I suggested the advisability of a consultation, and expressed the opinion that some operation might be necessary for her relief, but the patient was unwilling for anything of the kind, so no consultation was held.

With the light of the autopsy before us, it is well that no operation was undertaken, for, aside from the malignant character of the tumor, it was so firmly bound down by adhesive inflammation that it would have been impossible to have removed it successfully. The specimen presents some interesting points:

C. Z. H.—— mulatto, æt. 38, married. Died April 21, 1888. Necroscopy by Dr. D. S. Lamb. Much emaciation. Pleuritic adhesions at apex of each lung. Both lungs showed abundance of cheesy masses, varying in size from that of a pinhead to nearly an inch in diameter, most numerous and largest in upper lobes, where also were many cavities, some of which communicated with each other. Heart small, normal. Liver, spleen and stomach normal. Lower end of ileum showed many small ulcers, near mesenteric attachment; a few similar ulcers in ascending colon. Mucous membrane normal up to within 4 inches of anus, where was a perforation ½ inch in diameter, with congested margins. Nearly 1 inch higher up was another perforation, oval, transverse to axis of intestine, about two inches long and one wide, with congested margins. Both openings led into a sac the size of a new-born child's head, and containing soft dark fæces. The wall of the sac was thin and generally covered with peritoneum; adherent to uterus, upper part of vagina, rectum, wall of pelvis, cæcum and several folds of small intestine. It was easily removed from the wall of pelvis. Inner surface of sac corrugated, looking like bands of involuntary muscle. For some distance around the perforations the sac wall showed a somewhat flattened growth, about ½ inch thick at the thickest part and ulcerated. Uterus normal; vagina normal; right round ligament normal. Fallopian tube and fimbriated end not distinct. Left tube visible for a short distance, then lost in the mass of adhesions; ovaries not visible. Kidneys normal. Bladder somewhat distended.

Dr. W. M. Gray, of the Army Medical Museum, says the cheesy masses of the lungs are tubercular, and the new growth near the rectum is cancerous.

ANEURISM OF THE ARCH OF THE AORTA AND SUBCLAVIAN ARTERY.

Read before the Medical Society of the District of Columbia, June 6, 1888.

BY JOHN B. HAMILTON, M.D.,

SUPERVISING SURGEON-GENERAL, U. S. MARINE HOSPITAL SERVICE; SURGEON TO THE PROVIDENCE HOSPITAL, WASHINGTON, D. C.

The following case of *aneurism arch of aorta and subclavian*, reported for me by Dr. Carmichael, M. H. S., occurred under my observation at the Providence Hospital, Marine Ward:

Gordon Fitzhugh (negro), æt. 48 years; nativity, Virginia; admitted to Providence Hospital, Washington, D. C., April 6, 1888; died June 1, 1888.

History.—He was first admitted to hospital on February 14, 1888, suffering from severe dyspnœa, coryza and acute laryngitis. Examination revealed the presence of a subclavian aneurism and regurgitant mitral disease of the heart. A murmur was also heard at the aortic cartilage, but it was partly obscured by the blowing sound of the aneurism. Under appropriate treatment the coryza and laryngitis subsided; while rest in the recumbent position and the administration of potassium iodide, in doses of 1.20 gm., relieved the distressing dyspnœa. He improved until March 2, 1888, when, at his own request, he was allowed to go to his home. On April 6, 1888, he was readmitted to hospital in great distress, and under treatment he again somewhat improved; but the paroxysms of dyspnœa recurred at shorter intervals; were more distressing, and his strength was much reduced. The pulsation of the tumor in the neck and the accompanying thrill and bruit were strongly marked. Auscultation revealed a loud murmur over the mitral area, transmitted towards the base of the scapula. He grew much worse during the latter part of May; delirium set in on the evening of the 31st, and at 11 P.M. he died.

Necropsy.—(Nine hours after death.) Body fairly nourished. Rigor mortis present. Brain not examined. Lungs emphysematous at the borders and congested throughout. Heart very large, and walls of ventricles show beginning fatty change (compensating hypertrophy succeeded by dilatation and fatty degeneration). The ascending and transverse portions of the arch of the

aorta were dilated into a large aneurismal tumor, and the right subclavian was also the seat of a large aneurism which, having ruptured, could not be removed from the body in its entirety, owing to the numerous and intimate attachments to the surrounding parts. The thymus gland was extremely large, and accompanies the specimen. The gland had evidently continued to grow during adult life. The heart was very large, and the walls of the ventricles the seat of fatty change; the tricuspid and pulmonary valves were healthy; the mitral was the seat of atheromatous patches and nodules, and the valve was incompetent. The semilunar valves of the aorta were thick, leathery, the aortic orifice somewhat narrowed, and numerous deposits of calcareous material were found on the valves near their margins. The liver was fatty in patches. The kidneys were congested and the other viscera were healthy.

MEDICAL PROGRESS.

WOUND OF INTERNAL MAMMARY ARTERY: HÆMATOMEDIASTINUM. — A remarkable case under the care of PROF. MADELUNG has been reported in the *Berliner Klinische Wochenschrift*, and in the *Centralblatt für Chirurgie*, No. 19, 1888. On September 2, a man, aged 39, was stabbed with a knife in the head, thorax, and abdomen, but little hæmorrhage was noticed. He walked one hundred paces, reaching his dwelling, where it was found that intestine had prolapsed through the abdominal wound. Twenty hours after the injury he was taken in a wagon to the Rostock Infirmary, after a journey of over an hour. The intestine was reduced, having been left alone till admission, and the abdominal wound sewn up. The thoracic wound was on the right side, parallel to the third rib, beginning close to the border of the sternum. It was four-fifths of an inch long, and no blood escaped from it at the time; it was drained and sutured. There were no signs of cardiac or pulmonary mischief. On the evening of September 13, after doing well for many days, pain and dyspnœa troubled the patient, and hæmorrhage occurred from the thoracic wound, which recurred on the evenings of the 14th and 15th, so that the patient became anæmic. On September 16, Dr. Madelung opened the wound. The right third costal cartilage was cut through close to the sternum. Arterial hæmorrhage was observed above and below the cartilage, about an inch of which was resected. A cavity in the anterior mediastinum, "the size of a goose's egg," was exposed; it was full of clot. An inch of the fourth costal cartilage was resected; in so doing the operator opened the pericardium. Apparently that serous sac had been opened by the stab, and had speedily closed, the operation breaking down the adhesions which closed it. Much hæmorrhage accompanied the opening of the hæmatomediastinum, the blood gushing from the lowest part of the wound. Dr. Madelung therefore tied the internal mammary artery in the fifth intercostal space, in its continuity, when the hæmorrhage ceased. The cavity was packed with iodoform gauze, and a tampon of the same material was placed over the wound in the pericardium. The patient recovered. Dr. Madelung believed that the abdominal wound did well because no clumsy attempt to reduce the gut had been made by the patient's friends. He insists that, when the internal mammary artery is divided, both ends should be secured, on account of the innumerable anastomoses, especially with the deep epigastric.—*Brit. Med. Jour.*, Sept. 15, 1888.

SENSITIVE DENTINE.—One of the difficulties to be overcome in tooth filling is the occasional extreme sensitiveness of the dentine; and it requires considerable courage on the part of the patient to submit to the necessary cutting. Healthy dentine is endowed with but little sensibility, for if a tooth be accidentally chipped so as to expose a portion of the dentine without opening the pulp chamber, it can at first be touched without giving rise to pain, but after twenty-four hours' exposure to the fluids of the mouth it becomes irritable. Hyperæsthesia of the dentinal fibrils may follow any form of exposure—that due to caries, erosion, or fracture; and when present it varies considerably in intensity, not only in different teeth, but in different parts of the same tooth. Immediately under the enamel, in proximity to the pulp, especially the fibres radiating from the cornua of and just beneath the appreciably softened carious bone, are the situations of greatest sensibility. The two former are explained by anatomical facts. The dentinal fibres end at the periphery by forming a dense network, and open into the so-called inter-globular spaces, which, however, are filled with protoplasm similar to that contained in the laconæ of bone, the whole forming the granular layer of Tomes, and near the pulp the fibrils are both more numerous and of larger calibre. The deepest portion of the diseased bone is probably most sensitive, because here the calcareous material has been removed, exposing the fibrils, while it has not gone far enough to destroy them. It will readily be understood from this that superficial cavities are often very sensitive; then, as the disease progresses and this portion of the dentine is destroyed, there comes a time when there is but little pain from contact with acrid fluid or solid substances, but acute sensitiveness is again met with as the pulp is approached. Other things being equal, soft teeth, from their relative greater quantity of organic matter, will be more sensitive than hard

teeth, although there are many exceptions to this rule; also the teeth of the young more than those of the aged. The various methods of treatment may be summed up under the following heads: (*a*) operative measures, (*b*) desiccation, (*c*) cauterization, (*d*) local anæsthesia; and this is probably the order of their efficiency, although combinations are often valuable. (*a*) Sharp instruments, rapid motion of the engine, and taking advantage of anatomical knowledge by cutting away from the pulp and its cornua and across the line of the fibrils, will suffice in most cases. After the insertion of a temporary plastic filling for a few months, it will generally be found that most of the sensitiveness has disappeared; and this is the best of all treatment if the patient is under constant supervision. (*b*) In order to get thorough dryness, the rubber dam must be adjusted and the cavity swabbed out repeatedly with cotton wool dipped in $CHCl_3$ or absolute alcohol, or, better still, a current of hot air passed through the cavity. Chloride of zinc acts partly as a desiccator and partly as an escharotic, but its application is usually very painful, and its use contraindicated when the pulp is near. (*c*) Carbolic acid, chloride of zinc, nitrate of silver, and caustic soda all have their advocates—carbolic acid, perhaps, being the most general favorite. Arsenious acid left in for a few hours is most efficacious; but, owing to the numerous cases of death of the pulp resulting, is now rarely resorted to. (*d*) Cocaine alone, or in conjunction with sulphuric ether, although of great use as a local anæsthetic in treating pulps, has not proved of much service for sensitive dentine, as it is not readily absorbed. Other drugs, such as menthol and aconite, are equally disappointing. Dr. Ottolengui's method seems, as far as experience has gone, to give good results. He first dries the cavity with hot air, and sometimes uses carbolic acid as an escharotic, and then anæsthetises the dentine with ether spray. It is maintained that the pain produced is far less than the operation of cutting by any other method. It may be interesting to note the statement that, where teeth are forcibly wedged apart for the purpose of gaining room for filling, the pain of excavating is much diminished, presumably from constriction of the nerve as it enters the apical foramen. Cocaine injection into the gum, as used for extractions, has also been recommended, but has not given encouraging results.—*The Lancet*, Oct. 27, 1888.

SALICYLIC ACID IN MALIGNANT SCARLATINA.—DR. A. SHAKHOVSKY emphatically recommends (*Novosti Terapii*, No. 6, 1888, p. 208) the salicylic treatment of scarlet fever, the recommendation being supported by 125 malignant cases of the disease, with only three deaths. He always employs the following formula: ℞ Acid; salicylic; gr. xv.; aq. distill. fervid., ʒij; syrup. aurantior, ʒj.; M.S. From a teaspoonful to a tablespoonful every hour during the day time, and every two hours by nights. The solution of the acid is said to be perfect, as well as palatable. In about two or three days the patient's temperature falls from 41° C. down to 38.5° or 38° C., reaching 36.5° C. about the tenth day of the treatment. To prevent any relapse (of fever and all) the mixture must be administered every two hours for two or three days after the defervescence. Dr. Shakhovsky assures that salicylic acid, when administered after his plan, successfully prevents all complications (such as uræmia, dropsy, diphtheroid anginas, lymphadenitis, etc.), and even rapidly removes them when they are present. The salicylic treatment fails, according to his experience, (1) when it is resorted to too late (later than a fourth day of the disease of a malignant form), and (2) when there are simultaneously present certain severe chronic diseases or serious congenital defects.—*Provincial Medical Journal*, October 1, 1888.

BENZOATED CHLOROFORM.—DR. B. W. RICHARDSON recommends the use of benzoated chloroform as an antiseptic of considerable service in the treatment of fœtid wounds. It is made by dissolving three drachms of pure benzoic acid in twelve ounces of chloroform, and filtering if necessary. In a case of fœtid ulcer of the lower extremities, after the bandage has been applied, he prescribes a fluid drachm of the solution poured over or near the ulcer, the deodorizing effect being of the best character. He states that the solution is also the most effective that he knows of for removing the fœtor in troublesome cases of fœtid exhalations from the feet. Used like eau de Cologne, he finds it advantageous to rub over the hands at a post-mortem examination, and for similar purposes where a disinfectant is required.—*Asclepiad*, Vol. v, No. 19.

PILOCARPINE IN DEAFNESS.—M. BŒKE stated at the recent Otological Congress at Brussels that he had used pilocarpine in 14 non-selected cases of deafness. The causes of deafness were cerebro-spinal meningitis in 5 cases, a fall on the head in 4 cases, various pathological lesions of the middle ear in 2 cases, drugs (sulphate of quinine, salicylic acid) in 2 cases, and an affection of the tympanum in 1 case. Of the 14 cases 7 were of several years' duration, and 7 of from 3 weeks to 6 months. The quantity of pilocarpine given in each case was from 65 to 560 millig. The duration of the treatment was from 2 to 6 weeks. Some amelioration was obtained in 3 cases, in one of which the deafness was due to cerebro-spinal meningitis. Bœke concludes that the results of the pilocarpine treatment are discouraging. ROHRER has used pilocarpine with good results in deafness due to labyrinthine lesions, the hearing increasing from 2 cm. to 2 or 3 metres. He gives 5 millig. internally, three times a day.

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SATURDAY, NOVEMBER 17, 1888.

THE MEDICAL EXAMINING BOARD OF VIRGINIA.

Most of our readers—all who are interested in higher medical education—will be glad to learn that the Medical Society of Virginia, at its recent annual meeting at Norfolk, showed its appreciation of the valuable work done by the Board of Medical Examiners by re-electing the whole Board, with the exception of Dr. Lankford, who resigned (though not in consequence of any objection to him as an efficient member of the Board). At this meeting of the Medical Society of Virginia 180 members were present—the largest attendance in the history of the Society—and the action in regard to the Board of Medical Examiner was unanimous; the Society endorsed without a dissenting voice the policy of the Board of Examiners. It is evident, therefore, that the profession in Virginia appreciates the work done by the Board in the cause of medical education, and the Board now begins a term of four years' work, which we hope will be even richer in good fruit in the future than it has been in the past. The opposition that was expected, and which there was every reason to believe would be shown at the Norfolk meeting, did not appear except in the way of some rather uncomplimentary references to THE JOURNAL by a former opponent of the Board. THE JOURNAL has no intention of currying favor with any one opposed to higher medical education, especially when the opposition proceeds from personal motives. We are gratified to have received letters from members of the profession in Virginia saying that the stand taken by THE JOURNAL in the case of the Examining Board is appreciated.

To the owners, stockholders, and professors of the colleges that have been and are doing discreditable work we would say: You have been weighed in the balance, and are found wanting. There are but two courses open to you; go on as you have done in the past and are doing now, and some day you will find the seal of disapproval, professional and public, upon your permanently closed doors and empty lecture rooms. The other course is to do better work, and when you do this, you will be as much in favor of medical examining boards as the medical men who are loyal to their profession and thoughtful of the public welfare. There are far too many medical colleges in this country. Every new medical examining board created is a nail in the coffin of some unnecessary, low-class medical college. The colleges that hope to survive must begin the work of reformation now. The time will come when even *State* medical institutions must either place themselves on the side of higher medical education or drop out of existence. Professors in low-class medical colleges may fight boards of examiners, and ask to have *their* students exempted by legislative enactment from the test that will determine whether they are qualified to practice medicine. But they are both in the minority and in the wrong. The mass of the profession is against them, the teachers in the high-class colleges are against them, reason is against them, and the tide of intelligent public opinion is setting against them. Against the right and the majority they cannot hope to win. They must reform or close their doors.

These words are not directed more particularly to one low-class college than another, With the one case in which the teachers of a college declared war against a State Examining Board, and wished *their* students exempted from the State examinations, we have finished, for the present at any rate, since they seem to have seen the error of their ways to a certain extent. But the report of the Virginia Examining Board showed, in a way, that one-half of the colleges in this country are doing bad work—13 out of the 26 colleges whose graduates were examined by the Board. In the editorial in THE JOURNAL of September 6 we

gave a list of these 13 colleges, and some facts in regard to them that go to show that they are not doing good work, and why they should not be classed among high-class colleges. We shall await with interest the next annual report of the Virginia Board of Medical Examiners. Before it can appear, however, the colleges have a whole session in which to begin the work of reform. But if they persist in their former course they can expect only the inevitable.

THE HARVEIAN ORATION.

On October 18 DR. P. W. LATHAM delivered the Harveian Oration before the Royal College of Physicians, "to commemorate the benefactors of the College, and to encourage its members to search out the secrets of nature by way of experiment," in accordance with the express wish of Harvey. Dr. Latham points out directions in which further advances are possible, and suggests routes by which these advances may be made; he pictures some of the discoveries that have been made in modern times in matters connected with the circulation, particularly in reference to some of the changes in the blood that may be associated with or productive of disease, thus indicating some of the additions to Harvey's great contribution to scientific medicine.

Dr. Latham calls attention to the colorless corpuscles of the blood, and asks if there is an antagonism or attraction between these white corpuscles and the bacilli. How are the powers, action, and growth of the colorless corpuscles modified by the presence of micro-organisms? What part do the latter play in the production of disease? Is it true that a large part of all health and disease in the world is dependent upon them? These questions, and our inability to answer them, show the degree of importance that must be assigned to the discovery of these bodies, and account for the large amount of interest now manifested in them. Dr. Latham points out some of the facts that are now known regarding these bodies. There is but little doubt that in some disorders these organisms are the causal connexion, the virus of the disease—as in anthrax or splenic fever. In relapsing fever we have a disorder associated with a bacillus, the organism disappearing and reappearing, and the blood of the infected animal being intermittent in its power of communicating the disease to other animals. We all know how great interest has centred in the bacillus of tuberculosis, and how carefully this micro-organism has been studied for almost nine years. Following upon Koch's discovery of the tubercle bacillus came Metschnikoff's discovery of the antagonism between the cells and bacteria.

Bacilli may not be destroyed by the colorless corpuscles, however, but may live in the blood and tissues of the animal; what changes do they produce in this case? It seems now that certain chemical poisons are produced, capable of destroying life; as the result of albuminous or proteid decomposition or putrefaction certain animal alkaloids are produced, similar in nature and chemical composition to the vegetable alkaloids. Some of these ptomaïnes, as they are called, are harmless, while others are more or less poisonous. Had Kerner known this nearly seventy years ago he would not have been at a loss to account for the similarity of the effects of sausage poison to those produced by atropine. We need not go into an enumeration of the different ptomaines that have been discovered and described, since those interested in the subject can obtain what information they desire from the recent work on the subject by Dr. Victor C. Vaughan and Dr. Frederick Novy. Suffice it to say that, knowing the operations of the micro-organisms of fermentation and putrefaction outside the body, analogy would seem to show that the micro-organisms inside the body have similar functions, producing effects that we call disease, caused by the action of the body-microbes. Dr. Latham works out this question carefully, and shows on chemical grounds the possibility that such poisonous products may be produced by disintegration of albumen. He shows also that fatigue may produce these products, even without the intervention of micro-organisms, and suggests that under conditions of lowered vitality our bodies are more readily susceptible to bacterial infection—which is in accord with our knowledge of the etiology of disease.

Dr. Latham's interesting and suggestive lecture shows, to a degree, how vast are the uncultivated fields of medicine. "In the midst of all our weaknesses and all our many errors, we are certainly gaining knowledge, and that knowledge tells us, in no doubtful terms, that the fate of man is in his own hands."

HOW TO DRESS AND WALK.

Last Saturday the women of the Physical Culture Club, of Chicago, listened to a "Delsartian" lecture on "How to Dress and Walk," by a woman who is said to be one of the most accomplished Delsartians in the country. Physical culture clubs among women may be undoubtedly productive of much good; and that women should learn how to dress and walk is important; that they do not know how will be universally admitted. The lecturer last Saturday pointed out that women should abandon the corset, but the reasons seem to be more "Delsartian" than physiological. As far as she went in her advice in this matter she did not go wrong. The lecturer's description of the way to walk was, however, both unphysiological and absurd—though Delsartian. The following was the method given, with illustrations by the lecturer:

"If you put your whole weight on the heel instead of the ball of the foot the tendency is to make the back sink, the abdomen protrude, and the chest to draw in. The first thing for persons who wish to walk well and without effort, and who desire good forms and grace of movement, is to learn to step firmly on the ball of the foot. Next they should throw out and lift their chests as high as possible. Nations and individuals who retrograde are marked by retreating chests and shrinking carriage. There is something about developing a full, high condition of the chest that calls into action all the higher feelings of independence and self-respect."

We ask in all seriousness and with alarm: Is society to be infected with this new "fad," in comparison with which the "Grecian bend," now happily relegated to oblivion, was a blessing? Why has nature provided women with heels if these are not to be used in walking? Fashion and the shoemakers have already done enough in the way of deforming the foot, without the intervention of this new absurdity that tells women to step on the balls of the feet, and thus make walking dolls of themselves. Curious, that mankind, the highest of the animal creation, should be the only living creature that stultifies, deforms and mutilates itself for fashion's sake! Imagine a procession of women on a crowded street, each one stepping firmly on the ball of her foot, and then throwing out and lifting the chest! The heel was made to step on, to bear the whole weight of the body at the beginning of the step; as the body goes forward the weight is transferred to the ball of the foot, from which the spring for the next step is made. Had the Delsartian lecturer advised her audience to walk on their heels only she could not have committed herself to a greater piece of absurdity than that quoted. Putting the weight on the heel does not make the chest "draw in;" and if it makes the back sink and the abdomen protrude no one is the worse for it. Physiologists will certainly be astonished to know that stepping on the ball of the foot will develop the chest and awaken feelings of independence and self-respect. We were not hitherto aware that our moral intellectuality was located in the foot, and that if we trod on our heels we became slavish and lose self-respect. It would seem that a lecturer on physical culture should at least know something of primary school anatomy and physiology.

THE ILLINOIS TRAINING SCHOOL FOR NURSES.

The eighth annual report of the Illinois Training School for Nurses shows that this institution is in an unusually prosperous condition. The school is now located in its new building, which has ample accommodations for 100 nurses. The mortgage upon the old building still remains unpaid, but the board hopes soon to come into possession of the legacy left by Miss Phœbe L. Smith, when it will then be canceled. The founders of the school are making every effort to secure a fund that will enable them to send its nurses to those who cannot afford to pay for them.

In July last the school took charge of all the nursing in the Presbyterian Hospital, there being five floors and fifteen nurses. In Cook County Hospital the school has ten wards, and during the past year has supplied the county institutions with 107 nurses. One hundred and seventy-seven persons have made formal application to enter the school in the last twelve months. Of this number fifty-nine have been received as probationers and thirty-eight accepted after the trial month, the remaining twenty-one having failed for inefficiency. Six nurses were dismissed, one left on account of ill health, and two were married. The average number in the school has been sixty eight. The June graduating class numbered eighteen. The number of nurses now

in the school is sixty-six, with nine probationers and fifty registered graduates.

In September last the curriculum of study was revised, and the following text-books adopted: "The New Haven Hand-Book on Nursing," supplemented by Clara Weeks' "Text Book on Nursing," Hutchinson's "Anatomy and Physiology," Potter's "Compendium of Materia Medica," and as a reference library the standard works on anatomy, physiology and obstetrics. The students have opportunities for a broad and practical teaching at the bedside of the sick, as the school cares for an average of 500 patients daily. Lectures and classes begin the middle of September, and close the last week in June.

The almost unparalleled growth and success of the institution is due, in great measure, to the efficiency and faithfulness of the superintendent, Miss Hampton.

CANCER OF THE PYLORUS IN A LIVING SKELETON.

The St. Louis *Globe-Democrat* of a recent date contains an account of a case of resection of the cancerous pylorus in a "living skeleton." The patient, Joseph N. Robinson, of New York, has exhibited himself as a "living skeleton" for twenty-eight years, and is now 53 years of age. About six weeks ago he went into the New York Hospital under the care of Dr. William T. Bull, on account of having become so weak that he had to be carried about, and then only with great pain. On account of his extreme emaciation, probably, he would sometimes lie unconscious from morning till night, and during the night would be hysterical and sleepless. His manager had noticed for some time that there was a tumor in the pyloric region, which could be easily felt on account of the extreme emaciation.

At the time of the operation, about three weeks ago, the patient was 6 feet 2 inches tall, had a waist measure of 14 inches, and weighed 72 pounds. The tumor proved to be a stricture of the pylorus, showing some evidence of cancerous growth (?), and "would scarcely admit a lead pencil." Complete resection of the pylorus was performed, an opening made in the anterior wall of the stomach, and the resected end of the duodenum adapted to this opening. Although the operation was long, but little blood was lost, and the patient's condition was much better than had been expected. He had no fever, and his recovery was remarkably rapid. At the end of two weeks he felt better than he had for many years, and began to be ravenously hungry, but was allowed nothing heavier than peptonized milk and brandy. Since then he has entirely recovered and is gaining rapidly in flesh. He weighed 100 pounds two weeks after the operation.

"When the pathologist examined the stricture removed from Robinson he found an ordinary pin fast in the middle of the tumor. About this, as a center, ulceration had taken place, and the scars of these ulcers had caused the tumor and the stricture. When told of this circumstance Robinson recalled having swallowed the pin thirty years ago while holding it in his mouth."

The account of the case in the *Globe-Democrat*, is very interesting, and written in the usual happy style of the newspaper correspondent. We hope to see a report from a more careful pen.

EDITORIAL NOTES.

SCARLET FEVER at Palmyra, Wisconsin, has caused the schools of that place to be closed.

MALIGNANT DIPHTHERIA, according to recent reports, is prevalent in the neighborhood of Hawthorne, N. J.

HOG CHOLERA IN OHIO.—Local papers state that hog cholera prevails in Hancock Co., Ohio. In Portage township alone more than 6,000 hogs have died of the disease.

A CASE OF COCAINE POISONING has recently occurred in San Francisco. It seems that the sufferer took the drug without medical advice. The man was taken to a hospital, where he recovered.

A CASE OF SMALL-POX IN OMAHA seems to have aroused not only the Board of Health but the whole population of that city, and vigorous measures are being taken to prevent the spread of the disease.

YELLOW FEVER IN FLORIDA.—The yellow fever persistently continues to find new victims in Florida. November 12th thirty new cases were reported in Jacksonville and three deaths, making the whole number of cases reported to date 4511, and the total deaths 388. One new case was reported in Gainesville, Fla.

TRANSPLANTATION OF THE CORNEA.—On October 5 a little girl, aged 4 years, in Norristown, Pa., had the cornea of a rabbit transplanted in her eye. She was discharged from the Hospital on October 31, with favorable prospects for recovery.

THE McDOWELL MEDICAL SOCIETY met in Henderson, Ky., on November 2. About thirty members were present. Several papers were read and discussed. A grand banquet and hop was tendered the Society by the local members at the Barrett House. The Society will meet in Owensboro on May 3, 1889.

A PECULIAR DISEASE.—Bailey Walters, a prominent resident of Osage Township, Parsons Co., Kansas, died recently, in the 57th year of his age, with a peculiar malignant fever which is epidemic in that neighborhood. Within two months Mrs. Walters and two sons have died, and the remaining three members of the family are sick with the same disease. Last week James Smith and Geo. Mayes died, and four of the latter's family are sick with the fever.

CARCINOMATOUS ULCERATION OF THE AORTA was the cause of death on October 15 of a patient upon whom Dr. James Murphy performed gastrostomy for carcinomatous stricture of the œsophagus on September 9, 1887—the patient having lived 402 days. The immediate cause of death was hæmorrhage from the descending aorta, which had been ulcerated into by a carcinomatous mass.

THE "MARITIME MEDICAL NEWS" is the title of a new bimonthly journal printed at Halifax, N. S. The first number, for November, contains an address by Dr. P. R. Inches before the New Brunswick Medical Society, an address on the Nova Scotia medical act by Dr. William McKay, the report of a case of dilatation of the stomach, by Dr. Page, of Truro, and other interesting matter.

THE "UNIVERSITY MEDICAL MAGAZINE," the first two numbers of which (October and November, 1888) have been received, is edited under the auspices of the alumni and faculty of the University of Pennsylvania, and published by A. L. Hummel, of Philadelphia. The numbers at hand are filled with interesting papers, clinical memoranda, etc., and if merit is an indication of future success the *University Medical Magazine* will succeed.

EXTRALITE is the name of a new explosive, said to be twice as powerful as dynamite, and much safer to handle. It cannot be exploded in the open air, nor by concussion. It seems that it must be confined (tamped) and exploded by means of a fuse. Its safety should make it a popular explosive. The French Government is said to have paid one million francs for the right to use it. It is to be manufactured in this country in New Britain, Conn.

AN OPTICAL DELUSION.—The following is from the Philadelphia *Times* in regard to a young woman who has had one of her eyes replaced by a rabbit's eye, as it seems: "Miss Fisher told a reporter for the *Times* that she could see out of the right eye nearly as well as ever, and that she read quite well with it. Closing the right eye and looking with the rabbit eye, she said she could see to move about the room without stumbling over anything, and she could also count her fingers. At the reporter's request she removed her glasses, and then closing her right eye she was able to describe the movement of the reporter's hand, and in other ways show that, while the sight in the 'rabbit' eye is imperfect and limited, she can see with it." Perhaps, however, it was a case of transplantation of the cornea.

GETTING AHEAD OF DISEASE.—DR. P. R. INCHES, in a recent address before the New Brunswick Medical Society, instanced the city of Edinburgh as showing the benefits resulting from the intelligent use of sanitary and preventive measures. In 1862 the population of that city was 170,000, the deaths 4,661. In 1886 the population was 211,400, but the deaths were only 4,149—a fall of death-rate from 26.65 to 19.62 per 1,000; and the change took place mainly in the diseases most influenced by sanitary precautions—the zymotic class. In 1862 that group accounted for 19.73 per cent. of the total deaths, but in 1886 for 8.34 per cent. only, and this change represents a continuous fall in the percentage. In some of the poorer and over-crowded districts of the city there was a decrease of mortality varying from 3.77 to 20.71 per 1,000. Such diminution of mortality implies an immense saving of life, and is attributed by the authorities to relief from overcrowding, to the opening of new streets and breathing places, better water-supply, new drainage, improved plumbing, and to the system of

notification of infectious diseases, and the isolation and removal of the infected, and disinfection of the place.

OBJECT TO A LICENSE TAX.—It seems that the City Council of Salt Lake City have imposed a license tax upon physicians. At a meeting of the Salt Lake Medical Society, held on October 30, the following communication was passed and sent to the City Council:

At a regular meeting of the Salt Lake Medical Society the action of your honorable body relative to licensing the practice of medicine in this city was discussed. The result of this discussion was, that the present committee was appointed to wait upon the City Council and ask for a reconsideration, for the following reasons:

1. That a license imposed upon one of the liberal professions is unusual, and especially out of place as imposed in the medical profession, because physicians, as a rule, attend to the poor of the city in charity, and do a great deal of work without recompense.

2. If the object of the license is to raise the standard of the medical practice, thereby protecting those in the community incapable of judging the merits of a physician as against the illegitimate practice of medicine, we think the ordinance fails to meet such ends for these reasons: The class of medical men known as quacks draw about themselves a following, which pays them enormous fees, so that they are better able to pay a tax than the honest, conscientious, regular medical man. The quack pays his tax, does his business, the community is not protected, and the standard of the medical practice is not raised.

We would add that the medical society is heartily in accord with any movement which will raise the standard of medical practice in this city, and which will exclude those men known as quacks, and to effect this result we would suggest to your honorable body that such methods be adopted as are found in other communities, as the establishment of an examining board to investigate the merits of all wishing to practice medicine, which will grant certificates of recommendation for license—the fee being a nominal sum. We would respectfully ask your consideration of the above, and that your honorable body will repeal the tax which appears so unusual.

SOCIETY PROCEEDINGS.

Medical Society of Virginia.

Nineteenth Annual Session, held at Norfolk, Virginia, Oct 23, 24, and 25, 1888.

TUESDAY, OCTOBER 23—FIRST DAY.

The Nineteenth Annual Session of the Medical Society of Virginia convened in the Hall of the Young Men's Christian Association, Norfolk, Va., Tuesday, October 23, 1888, at 7:30 P.M., THE PRESIDENT, DR. BENJAMIN BLACKFORD, of Lynchburg, Va., in the chair, and Dr. Landon B. Edwards, of Richmond, Va., Recording Secretary. The Hall (capacity about 400 seats) was well filled—a number of ladies and gentlemen not Fellows of the Society being in the audience. About 180 Fellows in all were registered as in attendance during the session—the largest number ever in attendance upon any session of the Society. In addition, Dr. John B. Hamilton, Sup. Surg. Gen. of the U. S. Mar. Hospital Service, of Washington, D. C., and Dr. Milton Josiah Roberts, of New York City, were present as invited guests.

After prayer, DR. HERBERT M. NASH, of Norfolk City, delivered a most cordial *Address of Welcome* on the part of the professions of the "twin cities" of Norfolk and Portsmouth.

DR. WILLIAM T. WALKER, of Lynchburg, was then introduced by the President, and delivered the *Annual Address to the Public and Profession*, announcing as his subject:

MOSES AND OTHER DOCTORS.

Dr. Walker stated that the hygienic laws of Moses have no practically adopted equals to this day. His march of 2,500,000 people for forty years through the arid desert, all the while observing a system of hygiene such as has never been known in the records of time, was marvelous. The most thorough cleanliness in all things was required of each person. Chlorine preparations are among the best germicides known today; and yet Moses anticipated this latter day discovery by requiring the preservation of meats, etc., by the use of chloride of sodium. He taught how to disinfect buildings after leprosy had infected them, or, if they could not be purified to destroy them by fire. His laws in regard to the marital relation are perfection. If our women were to follow the special laws laid down by Moses for their health, their would be but little need for gynæcologists. It is claimed that *preventive medicine* must be the medicine of the future; but Dr. Walker proves from the records of Moses and those who followed him, that it was the medicine of the past. It is a striking fact in history that, while the other learned nations of

those ancient days had their high grade schools of medical learning, the Jews had none, for they did not need them so long as they observed the laws of Moses. Passing references were made to the medical records of Hippocrates, of Celsus, of Galen, etc., down to the time of the Great Physician, who came not to destroy the laws of Moses, but to fulfil them. Luke, the "beloved physician," was a scholar of the highest culture and a faithful friend to Paul in prison while it was a danger to himself to be such—illustrating that the true doctor does not flee when danger approaches. Touching allusions were made to the faithful doctors of Norfolk of 1855 when the terrible epidemic of yellow fever swept that city. Tributes were likewise paid to those doctors of Jacksonville and other places who, this year, are sacrificing their lives for the safety of the people. Credit is awarded to the late Dr. Crawford W. Long, of Athens, Ga., as the discoverer of modern surgical anæsthesia by ether. A eulogy is likewise passed upon the immortal Dr. J. Marion Sims. References were made to others who have taken up and further perfected the life work of these great men.

SIXTY-NINE NEW FELLOWS.

The committee on nominations recommended the applications of sixty-nine doctors, who were duly elected Fellows of the Society during the session.

WEDNESDAY, OCTOBER 24—SECOND DAY.

THE PRESIDENT called the Society to order at 10 A.M.

The Recording Secretary presented his report, which showed that during the year just ended, thirteen Fellows had died, and two had resigned Fellowship because of removal of residence from Virginia.

The *Executive Committee* (Dr. W. W. Parker, of Richmond, Va., Chairman,) reported that Dr. James Parrish, of Portsmouth, had been duly nominated to the Governor of Virginia for commission to fill the vacancy on the Medical Examining Board of Virginia caused by the resignation of Dr. L. Lankford, now of Norfolk, Va., which nomination was confirmed by the Governor.

The constitution of the Society was so amended as to permit parties—always of the white race understood—to become Fellows of the Society who had secured certificates of satisfactory examination for license to practice in Virginia, whether graduates of medical colleges or not.

DR. THOMAS J. MOORE, of Richmond, presented the report of the committee appointed by the joint committees of the Medical Examining Board of Virginia, and the Medical Society of Virginia, during its last annual session, to petition the Legislature of Virginia to

AMEND THE EXISTING LAW.

The Committee succeeded in securing amendments in the two important particulars as follows:

1. Requiring all applicants for license to practice medicine in Virginia to stand satisfactory examinations before the Medical Examining Board of Virginia *in session;* or

2. In exceptional instances, for sufficient reasons, to be decided upon as such by the President of the Board, applicants may be granted permission to stand examinations before a Committee of three members of the Board—the Committee to hold the examinations *only in a session*, and not individually as formerly.

The special order of business at 11 o'clock of the morning of the second day's session being the "Annual Address of the President," and that hour having arrived, DR. BENJ. BLACKFORD read a well prepared address on *The Progress of Medical Education, and the Importance of the Study of the Physical Sciences in Relation Thereto, during School Life.* This address will be published in the volume of the Society's *Transactions.*

The subject for general discussion was next called for:

ATYPICAL FORMS OF TYPHOID FEVER.

The appointed Leader, DR. WILLIAM C. DABNEY, Professor of Practice of Medicine in the University of Virginia, opened the discussion by reading a paper on the subject. He took the ground that the disease had become distinctly milder of late years, and that the symptoms, such as diarrhœa, eruption, and the *gradual* rise of temperature which were formerly considered characteristic, are now often absent. That these cases are nevertheless cases of genuine typhoid fever, he considered proven by the following well established facts:

(*a*) The cases usually present some of the peculiar characteristics of the disease.

(*b*) Hæmorrhage from the bowels occasionally occurs in these cases.

(*c*) The intestinal lesions characteristeric of typhoid fever have been found on post-mortem examination.

(*d*) These mild or atypical cases are capable of originating epidemics of typhoid character.

The conclusions arrived at by Dr. Dabney are thus stated:

1. The disease in this country is gradually becoming milder, and symptoms which were formerly thought to be characteristic and almost invariable are now much less frequently present.

2. The diagnosis of the disease is often attended with extreme difficulty, and in the early stages is generally impossible.

3. In those cases which are apparently extremely mild, dangerous symptoms may arise suddenly, and a fatal issue may ensue from errors in diet or other imprudence.

4. In all doubtful cases precautions should be taken to prevent the spread of the infective principle or germ, and to guard the patient against danger from imprudence.

5. The dangers to be especially apprehended in these cases are exhausting diarrhœa, hæmorrhage, and perforation of the bowel.

6. In view of these dangers, patients should be placed upon liquid diet; should be confined to bed; and constipation, when present, should be relieved by enemata, and not by purgatives, even of the mildest character.

DR. JOHN HERBERT CLAIBORNE, of Petersburg, said that the first point is the selection of a common ground upon which contestants may stand. In other words, a mutual but definite understanding of what each may mean by the term typhoid fever. The subject proposed—"Atypical Forms of Typhoid Fever"—supposes, of course, that there are "typical forms." What are these? By the expression *typical* he thinks we all agree that *representation* is meant—and a typical case of typhoid fever is understood to be a representative case. Now, what are the symptoms that *characterize a representative, or typical case?* In its generic or derivative sense, we should say that a typical case of typhoid fever should show at sometime during it course symptoms of stupor, or at least, of dulness or hebetude of mind. There should also be noted a diarrhœa of peculiar form—that there should be a pathognomonic rose-colored eruption on or about the 14th day of the disease—that there should be epistaxis—ordinarily slight. We should say, again, that the fever was self-limited; that it was, perhaps, mildly infectious; that it oftener attacked adolescents; that it had its own recognized microbe; and that above all others necropsy should develop, distinctly and unquestionably infiltration and ulceration of the glands of Peyer. We might add to these general symptoms, slight bronchitis, gurgling in the right iliac fossa, headache, anorexia, tawny flesh of the cheek, and a temperature steadily and progressively rising and subsiding.

The question then arises, how many and which of these symptoms can we eliminate from a *typical* case in order to render it *atypical?* In other words, if typhoid fever be a disease marked by certain pathognomonic symptoms and pathological lesions, how many or what symptoms or lesions can we take out and still leave the disease an entity—a recognizable unit? And, if we are not in danger of multiplying words, are we not in danger of multiplying diseases to the confusion of diagnosis?

There is a fever, a summer and autumnal fever, common to many sections of Virginia which it has become fashionable to note as *typho-malarial fever*—a term that originated during the late war between the States, and for which the late Dr. Woodward of the United States Army was perhaps responsible. At least he contended that it was a substantive fever, with its own symptoms and its own pathological lesions, and though he subsequently confessed that he was mistaken and recanted at the International Congress of Physicians, in Philadelphia, ten years later, the name has never perished. Wherever there is malaria now—and that seems ubiquitous—there we have typho-malarial fever. Dr. Cutter has published in parallel lines a differential diagnosis between typhoid fever and typho-malarial fever, which throws great light on this subject, and places the latter where, of right it belongs, viz., in the class of *ordinary bilious remittent fever*. Any fever, or any disease, may assume under certain unsanitary or depressing influences, a typhoidal character; but that does not constitute the peculiar intestinal, enteric, or typhoid fever to which we were introduced in our student days by Lewis, or Gerhard, or Wood; nor can we think that there is any blending of type in the two forms—any swapping or coincident or concurrent cultivation of the microbes peculiar to each. And in the treatment of these so-called typho-malarial fevers, the early, honest, and judicious administration of quinine will ordinarily cut short the attacks. He has rarely seen one of these hybrid fevers run into a typhoid condition unless there was delay in the exhibition of the great antiperiodic, or it were given in pills or capsules and, per consequence, undigested, or unless there was present some real or imagined idiosyncrasy preventing the use of this agent. When the fever persists in spite of this treatment you may suspect the correctness of your diagnosis, or know that there is some local cause of irritation apart from malaria. In his experience, a mild mercurial every night, guarded or not with some preparation of opium, according to the condition of the bowels, and from twenty to thirty grains of quinia at the period of remission, with fifteen grains of antifebrin, or thirty grains of antipyrin during the period of exacerbation, in three equally divided doses, will ordinarily cut short the fever in from three to eight days.

DR. W. G. ROGERS, of Charlottesville, presented a paper tending to strengthen the evidence already existing that *drinking water polluted by sewage* is a most fruitful source of typhoid fever. Previous to the establishment of the Charlotteville Water-works by which pure mountain water is now supplied to the city there was much typhoid fever. Then his place was supplied with well water contaminated by surface drainage, etc. But now typhoid fever is comparatively rare, and the cause of the few cases that are occurring is traceable to the fact that the parties use well water. Of the total of fifteen cases of this disease seen by him within the past two months, all were users of well water, which wells were plainly the receptacles of contaminated surface drainage. As illustrative of *atypical* forms of typhoid fever seen

by him, he mentions one with very slow pulse in a boy 10 years old. He also had all the usual signs and symptoms of typhoid fever except fever itself. His pulse varied from 48 to 50 for three weeks; and during the same period of depressed pulse, especially during the evenings, his temperature was subnormal—varying from 96° to 98° F. He reported also two slow-pulse cases, occurring in sisters, aged 12 and 14 years, respectively, sick at the same time; but the other prominent symptoms of typhoid fever were wanting, and the disease was definitely diagnosed simply by the fact that four typical cases were present in the same house at the same time—all due to the one cause of drinking contaminated well water. One slowly improved and was convalescent in two months; the other sister died from asthenia at the end of the fourth week. Autopsy revealed deep ulcers of the ileum, but no perforations. These girls developed a disposition to sing throughout the disease—a disposition not before developed. He reported another case, in a girl 17 years old, in which the average morning temperature (106° F.) was higher than the evening (104° F.). She apparently passed into a comatose stage several times, from which she was relieved by stimulants—an odd fact in itself. He also reported a uræmic case relieved by jaborandi.

Dr. Thomas J. Moore, of Richmond, asked Dr. Dabney if he recognized such a fever as typho-malarial? The reply was, Yes, but he thought it was the product of two diseases in the system at the same time.

Dr. S. K. Jackson, of Norfolk, read a paper relating to some points in the

TREATMENT OF TYPHOID FEVER BY THE SALTS OF AMMONIUM.

(See The Journal of Nov. 24.)

Dr. Lewis G. Pedigo, of Roanoke, stated that he has found great difficulty in diagnosticating some cases of fever recently occurring in his section; but they were finally recognized as atypical forms of typhoid fever—the peculiarity consisting chiefly in the high temperature from the very commencement of the attack. It was the form of cardiac typhoid fever spoken of in some of the books, in which there was early failure of the heart. There was great difficulty in controlling the temperature throughout the attack, especially during the latter stages, and the disease ran a very rapid and generally fatal course. The difficulty of differential diagnosis was chiefly between cardiac typhoid fever and a type of continued malarial fever occurring in some localities, mostly about the mountain regions. Even in these malarial types, as also in typhoid fever, quinia does harm. It certainly should not be given in larger quantities than about 5 grs. in twenty-four hours. From the onset to the decadence of the fever, muriatic acid should be given in repeated doses each day. Antipyrin is also useful, and when he associates the acid with antipyrin, he thinks he has made the best therapeutic combination.

Dr. John H. Neff, of Harrisburg, said that he could confirm what had been so well expressed by Dr. Dabney, though his fields of observation were different. During the past summer he has seen many cases of atypical typhoid fever like those described by Dr. Dabney. There was some difference of opinion expressed in his vicinity as to the nature of these cases—one observer holding that they were malarial. He did not believe there was a malarial miasm in Harrisburg. Early recognition of these cases was very important. Treatment consisted in absolute rest and diet; individualizing each case. He thought typho-malarial fever a misnomer. We might as well say pneumonia-malarial, dysentery-malarial, etc. Environment modified all diseases. He could not endorse Dr. Jackson's ammonia treatment, and did not believe in any specific for the disease.

In answer to a question by Dr. S. K. Jackson, Dr. Neff stated that he had been using the nitrate of ammonia treatment, etc., advocated by Dr. Jackson, for a few months—sufficiently long to persuade him not to depend upon it in the future.

Thursday—Evening Session.

Dr. C. T. Lewis, of Clifton Forge, read a paper devoted principally to a

NEW TREATMENT OF TYPHOID FEVER.

He thinks if he can keep the secretion of bile anywhere near its normal quantity and condition, the disease will run a mild and favorable course, because the bile will destroy, or prevent the germs of typhoid fever from finding lodgment in the intestinal canal, or will remove or destroy them if reached. Mercury in some form is about the best and the most commonly used cholagogue. Mercuric chloride is especially recommended on the ground that it neutralizes the toxic product of the disease germs, without destroying the animals themselves, and acts most decidedly upon the liver as a cholagogue. The bile flows into the bowel and acts as a germicide and antiseptic. But after awhile, the continuous use of mercury brings out its own poisonous effects upon the human system, depressing especially the nervous forces, so as finally to bring about a typhoidal condition. It may even cause diphtheritic ulcerations of the intestines, upon which podophyllin, rhubarb, jalap, euonymin, etc., produce a uniform bile secretion, but they irritate the bowels—they are purgatives as well as cholagogues. Ox-bile—theoretically suggested as the correct drug—has been practically tried, but failed to accomplish what was wanted of it. After careful consideration of all the facts, Dr. Lewis now adopts the following plan of treatment: At intervals of two

hours give three doses, but not more, of a powder composed of 2 grs. of calomel and 1 of rhubarb. After this, throughout the whole course of the disease, night and day, give 10 drops of dilute nitro-muriatic acid in a wine-glass of water every two hours. Also give a quarter-glass of fresh milk every three hours, night and day. If the acid and milk come at the same hour, give the acid first, as it gets out of the stomach sooner than the milk. If the patient becomes restless at night, give 2 grains of Dover's powder every two hours, beginning about 2 o'clock in the afternoon, until four doses, and no more, are administered. If the fever rises above 103° bathe the shoulders, upper part of the chest, neck and arms, in cold water every twenty minutes, with a basin of cold water by each side of the patient for his hands to play in; and cloths wet with the same cold water are laid around the neck and on the bowels. The result of this plan is that of 180 cases so treated by Dr. Lewis, only four deaths have occurred, and these deaths were the results of preventable causes by the patients themselves. Be careful not to allow solid food until the patient is well convalescent.

DR. ALBAN S. PAYNE, of Markham, totally differed with Dr. Lewis. The old treatment of Dr. George B. Wood was the best. If Peyer's patches were ulcerated, nitro-muriatic acid would do them injury as an irritant in such a fever.

DR. GEORGE T. WALKER, of Vinton, asked if it was a sufficient length of time to allow two days after the fever leaves before letting the patient take any solid food? Dr. Lewis replied that two days was ordinarily long enough. Then he begins by giving a small Irish potato and a little light bread.

DR. WM. W. PARKER, of Richmond, gives a little chicken soup as soon as possible. It is easily digested and is nutritious, and is not irritant to the inflamed ileo-cæcal region of the bowels.

DR. GEORGE E. WILEY, of Abingdon, asked Dr. Lewis if he ever gave any antipyretics during the course of the fever? Dr. Lewis answered that he did not, except the cold water baths, to which he had referred.

DR. J. H. NEFF, of Harrisonburg, said that he had do faith in any routine treatment of typhoid fever. Early diagnosis is most important. In many cases, absolute rest, both mental and physical, absolute diet, proper surroundings, with good nursing, etc., will lead to recovery. Each case must be individualized and treated according to its symptoms. Some patients cannot take milk. In such cases, he gives chicken and beef soup. Antipyrin, antifebrin, quinine, etc., often ameliorate the symptoms, according to his experience. Morphia often acts well in inducing sleep, easing pain and lowering temperature. Observation shows that quinine is still a good antipyretic—especially in the afternoon—and in many cases does not irritate the stomach, or depress the system, like antipyrin and antifebrin. Opium is often also a splendid antipyretic. But sponging the body with cold water, often repeated, allows us generally to dispense with antipyretics. Aperients are not indicated in any stage; he relies upon enemata to relieve constipation. The mortality of this disease is greatest between the ages of 20 and 30 years. When hæmorrhage from the bowels occurs, he gives opium and enjoins perfect rest.

DR. HENRY M. PATTERSON, of Staunton, spoke of the atypical form of typhoid fever, which starts off with *high* fever and headache. In such cases, we must give some such remedy as antipyrin. Quinine also acts well in these cases. If, however, the sudden onset of high fever and headache spoken of is followed by a chill, the case is not one of typhoid fever, but is a continued fever of another kind. In regular or typical cases of typhoid fever, he has had good effects from aconite as an antipyretic.

DR. WILLIAM L. ROBINSON, of Danville, stated that typhoid fever varied in different sections, being modified by malaria and hygienic surroundings. An uncomplicated case of typhoid fever commencing with general malaise, moderate fever, dry tongue, quick, corded pulse, gradually increasing temperature, reaching its acme at the end of the second or third week, subsultus, tympanites, tenderness in the right iliac region, hot dry skin, delirium, etc., requires conservative management, such as moderate quantities of liquid diet, avoiding that excess which fails of digestion, and produces fermentation and diarrhœa. Turpentine is a diffusive stimulant and antiferment, as is carbolic acid, in connection with tincture of iodine. High temperature produces changes in the blood and parenchymatous degenerations, which weaken the muscular power of the heart. Antipyrin in moderate doses quiets the nervous system, reduces temperature and does much less harm than continued high temperature. The rectal use of digitalis, opium and whisky well sustains the flagging circulation. The use of alcohol in fevers, as recommended by Dr. Flint, in his paper before the International Medical Congress, he fully endorses. He believed in guarding the stomach and guiding the patient through the attack. He could not concur with Dr. Lewis in the use of ten drops of nitro-muriatic acid every two hours, and a quarter of a glass of milk, because it would, in such quantities, produce irritation of the alimentary canal and coagulate the milk, and cause fermentation and gas.

In reply to the criticism, he stated that while nitro-muriatic acid in proper proportions, aided digestion of milk, yet, in the quantities suggested by Dr. Lewis, it would produce results first claimed. He stated further, that the patholog-

ical condition of the alimentary canal in typhoid fever implied ulcerative and inflammatory conditions, and it was a well known fact that, even in ordinary ulceration of the stomach, an absolute alkaline condition offered the only redress. He therefore concluded that such an amount of acid as was suggested, was irrational. He urged upon the Society to be slow in accepting the statistics of a limited number of cases as proof of the efficacy of any line of treatment, for the epidemic might have been, and most probably was, of a mild type, and needed little treatment of any kind. He believed that ten drops of nitro-muriatic acid every two hours, and a quarter glass of sweet milk, would, if persistently used, put any healthy man in bed in forty-eight hours. He had not heard the paper and discussion, prior to his coming in the room, but he was convinced that that form of fever which presented excessive high temperature in the beginning, clean tongue, a pulse not exceeding 100 a minute, good digestion, no diarrhœa or tympanites, etc., would be materially modified by quinine, because malaria was the complication.

Dr. Hugh T. Nelson, of Charlottesville, said that he had received his medical education in Piedmont, Virginia. At that time typhoid fever was considered *the fever* of the section; and upon settling in a section of the State, in which malarial diseases were of frequent occurrence, he frequently thought he saw cases of typhoid or enteric fever; and subsequently, upon removing to Charlottesville, he had seen a good many cases of continued fever, some of which resembled the cases he had seen in the Lower Country; while other cases differed from it in many particulars. The important point was to decide in any given case of continued fever, whether or not he had present a disease, which had its starting point in *irritation*, and subsequent inflammation of the intestinal glands. Unless this point could be determined, there was no certainty that we had typhoid fever. Hæmorrhage from the bowels occurred by passing congestion in cases of fever in which, though the interval glands showed congestion also, there was no ulceration, and no actual acute inflammatory condition. In another class of continued fever, the hæmorrhage, when occurring, occurred by an acute inflammatory process, which destroyed the previously much enlarged intestinal glands and the blood-vessels supplying them—the general mucous surface of the bowel remaining intact, or else only showing slight *active* congestion, evidently secondary to that occurring in the glands. He believed this to be the characteristic form of hæmorrhage in typhoid fever. These were certainly *typical* cases of this typhoid or enteric fever; but many cases are no doubt put in the category of typhoid fever which do not properly belong there. The importance of a differential diagnosis cannot be overestimated in the study of continued fevers, so that proper treatment may be instituted.

Dr. Lewis G. Pedigo, of Roanoke, objected to certain doctrines laid down by Dr. Robinson. The great effort now being made to arrive at a specific treatment of typhoid fever will finally bring about a tangible result. The trend of medical thought and medical practice in this connection is toward the chlorine group. He believes that the proper use of some member of this group of germicides will ultimately furnish the key to the solution of the great problem. He criticized Dr. Robinson's objection to the acid treatment by suggesting that muriatic acid as an important agent in the process of digestion; and so far from aggravating the already existing irritation of the alimentary canal, it has a tendency to relieve such irritation by *preventing* fermentation, which produces the irritating agents.

Dr. C. T. Lewis does not believe that nitric acid prevents putrefaction.

Dr. L. B. Anderson, of Norfolk, stated that all the speakers had seemed to assume that bacteria are pathological factors, whereas they never have been, and never can be such. They are of vegetable and not animal origin. He has never seen any signs of life in any vegetable or animal matter, or laudable pus from anthrax, furuncle, abscess, or gonorrhœa, until it has been exposed to the air under suitable temperature—until, in short, fermentation or putrefactiou had developed. Bacteria, therefore, are a product, and not a cause of fermentation or putrefaction. We should rather look upon bacteria as the best friends the doctor has for preserving health.

(*To be concluded.*)

Medical Society of the District of Columbia.

Stated Meeting May 23, 1888.

Charles E. Hagner, M.D., Vice-President, in the Chair.

Dr. G. Wythe Cook presented the specimen and read the history of a case of

CANCER OF THE INTESTINE.

(See page 699).

Dr. Busey: The specimen presented by Dr. Cook is very interesting and presents unusual conditions for a malignant growth. It looked like a cyst that had sprung from the uterus. He moved its reference to the Microscopical Committee. Carried.

Dr. H. L. E. Johnson presented the specimen and read the history of a case of

FIBROID POLYPUS OF THE UTERUS.

History.—Mrs. T., white, æt. 33, four children

and no miscarriage. Last child delivered by me two and a half years ago;. labor normal. Has always been healthy. Menses normal, lasting seven or eight days. Has complained of no special symptom till about five months ago, when she noticed an excessive leucorrhœal discharge, which increased steadily in amount and became more offensive till the odor could be noticed anywhere about the house. She had weakness, nervousness and backache.

Examination showed vagina filled and distended with a decomposing soft mass about the size of a fœtal head, breaking down under the least pressure. Its point of attachment could not at the time be made out. After removing the vaginal portion by forceps the vaginal walls were found to be covered here and there by large ulcerated patches caused by pressure, and the cervix was covered with granulations which would bleed on the slightest pressure. It looked like a malignant carcinomatous condition. The sound passed 7 inches into the uterus. The mass was found to be attached principally at fundus uteri, and at points in cervical canal.

On May 7 the patient was anæsthetized by Dr. D. K. Shute, and being assisted by Dr. James T. Young, I dilated the cervix (cervical attachment having been separated before) and passed the ecraseur as far as the fundus and around the growth separating it. Applied tincture of iodine (Churchill) to uterine cavity. No hæmorrhage followed; nor pains, nor soreness. Required no further treatment. Patient up on eighth day, well. Vagina and uterus normal. It is interesting and peculiar, as there was no hæmorrhage nor menorrhagia, and that so large a decomposed mass produced no septic symptoms. After separating the cervical attachment of the growth septic symptoms developed from absorption through denuded healthy surfaces. These were relieved by antiseptic injections and the application of a saturated solution of chromic acid.

DR. REYBURN: To what did Dr. Johnson attribute the septic symptoms after operative interference?

DR. JOHNSON: It resulted from the breaking down of the attachments to the cervix.

DR. SAMUEL C. BUSEY read a paper on

NEURALGIA OF THE LINGUAL BRANCH OF THE RIGHT TRI-FACIAL NERVE.

(See page 697).

DR. J. TABER JOHNSON: Was electricity tried in Dr. Busey's case?

DR. BUSEY: It was suggested, but the patient was unwilling to try it.

DR. A. F. A. KING: The attacks started after reading aloud for some time. The woman was not accustomed to it and this would be an unusual use of the tongue for one 57 years old. This evidence was corroborated by the fact that talking and masticating produced pain. What remedies had been used? Was she anæmic?

DR. BUSEY: The patient stated she had taken large quantities of quinia and other drugs; had been salivated; her face and jaw had been blistered; anodynes of every description had been used locally and hypodermatically; and she had grown worse all the time. She was not anæmic, but in good health. Mastication was interrupted, and she had to be very particular with her dietary. She could not eat bread and potatoes. After reading aloud for three or four weeks the first attack began and the paroxysms recurred at intervals until spring. These attacks recurred annually for seven years, at the beginning of winter. The summer of 1887 was spent in the North; she came here in November, and soon after went into a greenhouse and the paroxysm suddenly came on. She had derived comparative ease from small doses of morphia, but was not cured.

DR. SCHÆFER: Had suffered from tri-facial neuralgia caused by a carious tooth. He found that if he neglected his food the exacerbations were worse and the paroxysms lasted longer. He had advised systematic feeding and keeping the stomach full. This seemed to assist the remedies and have a beneficial effect. He had found the same experience with the temperature; they appeared in October and disappeared with the coming of spring. No two cases of neuralgia are alike. He derived great benefit from 2 grs. of opium, 10 grs. of quinia and 2 ozs. of whisky.

DR. REYBURN: Had had a patient under his care for neuralgia of the scalp, caused by cutting the hair very short. He was benefited but was subject to attacks afterwards. He was relieved by potassium iodide and cod liver oil. Had no evidence of syphilis. Dr. Busey's case might have been benefited by surgical treatment.

DR. J. FORD THOMPSON: In all such cases where medical treatment fails it is well to try surgical. To treat neuralgia of the lingual nerve surgically can only be practiced on the anterior part of the tongue where it is very superficial. The nerve might be cut on the side of the tongue and the neuralgia relieved, but such a procedure would be impracticable posteriorly, where the nerve is very deep. He then gave the histories of two very interesting cases of neuralgia of the tri-facial nerve, where operation had afforded some relief. In one he had cut the nerve at its exit from the foramen rotundum, and he had had relief for a year, but now wanted to be operated on again. But Dr. Thompson did not know what to operate on. He had tried electricity, but the patient was made very much worse. If he could locate a painful nerve he would operate. This is about the history of a great many cases of tri-facial neuralgia. He could only find recorded two successful operations.

DR. SOTHORON called attention to the value of

antipyrin in the treatment of neuralgia. He had treated several cases successfully with it in combination with morphia and quinia.

DR. HOWARD mentioned a case recorded in Sir Charles Bell's Memoirs. A child was treated for neuralgia with the usual methods then in vogue, and given up. Bell found green matter running out of its mouth, and found an abscess in front of the ganglion of Gasser.

DR. BUSEY: The history would exclude any local cause. He had considered the propriety of the operation referred to by Dr. Thompson, but had concluded it was impracticable, because these and, perhaps, other nerves were involved. He thought it probable that a better result might be obtained if the treatment tried during the past winter could be begun early and faithfully carried out. He had not supposed that the general subject of facial neuralgia would have been discussed, but had hoped that the peculiarities of the reported case would have commanded the attention of the members.

DOMESTIC CORRESPONDENCE.

LETTER FROM NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Neurasthenia; its Differentiation and Treatment.

At the first meeting of the season of the Section on Practice of the Academy of Medicine there was an animated discussion on the much vexed subject of neurasthenia, which was introduced by Dr. Landon Carter Gray in an elaborate paper entitled:

"Neurasthenia; Its Differentiation and Treatment." Dr. Gray first directed attention to the fact that functional nervous diseases are largely disregarded by the general practitioner because of the modern development of the study of them, although the need of their proper classification was widely felt, especially by neurological specialists. For this reason it was that the writings of the late Dr. Geo. M. Beard had had such a success in Germany. Dr. Gray did not believe that properly so-called neurasthenia was as prevalent as the followers of Beard would have us believe. He stated that, in his opinion, there were three forms of neurasthenia: the reflex, the lithæmic and the simple. The reflex form was due to vicious habits and reflexes from non-nervous organs, the lithæmic was due to the condition known as lithæmia, and the simple form was that in which there was true nervous prostration. The points of differential diagnosis of these various forms were then dwelt upon. But, he said, neurasthenia was also to be differentiated from a number of nervous diseases, especially the early stages of the latter, such as the morbid fears (for which Dr. Gray suggested the name of functional insanity), and which really belonged to the insane diseases and were often associated with them; melancholia, especially the mild cases, in which suicide was often committed; the early stages of mild chronic forms of insanity; neurotic conditions in which the individual is subject to migraine, hysteria, angina pectoris or anginoid attacks; the early stages of general paresis of the insane or of locomotor ataxia; and a peculiar disease described a year ago by Dr. Hughes Bennett, and called by him muscular hypertonicity, in which the symptoms are those of weakness and exaggerated reflexes of the lower extremities.

The prognosis of these different forms was variable, depending upon the severity of the reflex cause when present, and the possibility of thorough treatment. The treatment of the reflex form was the removal of the cause, if possible. The lithæmic form was to be treated by moderate laxatives, dilute nitro-muriatic acid and, if the nervous symptoms were severe, by rest. In any event, rest was a most important adjuvant, and should be proportioned to the needs of each particular case; it being better to have rather too much of it than too little. The diet should be regulated to a moderate degree by the entire withdrawal of either starchy or nitrogenous material for a short time, and then by the cutting down of the starchy material permanently by at least 50 per cent. In hot weather it was sometimes advisable to cut off the nitrogenous material for several weeks; and a complete change of air was often of the greatest benefit.

In the true cases of neurasthenia the best treatment was that advocated by Dr. Weir Mitchell, of rest, forced alimentation, massage and Faradism. Large doses of iron and malt extract should also be given in this treatment, the great difficulty with which was, however, that patients are apt to be disappointed at the loss of their muscular strength upon first getting out of bed. It should be explained to them that this would gradually return; but great care was necessary with many patients at this period to prevent them from losing the flesh and red blood that had been gained. Galvanism was an agent of great value in all these forms of neurasthenia, and it should be used as early as possible, except when the case is to be put to bed. It should be applied by means of large sponges, one at the nape of the neck and the other on the dorsal spine, 5 to 15 milliampères of electricity being used, and the sittings continued every day for from three to five minutes. Massage was an uncertain remedy, often irritating the patient, and was only to be used in connection with the rest treatment mentioned.

Dr. W. R. Birdsall thought that we must unquestionably admit a neurasthenic element in disease; yet at the same time, when we attempted to apply it to a group of symptoms, we found that

it often failed. In many individuals the nervous tendencies predominated as a result of hereditary influence, and it seemed to him that the great danger was in assuming that we had a congenital neurasthenic condition, when the symptoms were in reality due to local causes or merely temporary conditions. The class of cases which Dr. Gray called the lithæmic would probably comprise the greater number of these, and it was important that they should not be treated on the basis of an unstable or defective hereditary nervous system. If we were to use the term neurasthenia at all, then, he thought we should confine it to the class of individuals who suffer from inherited defective nervous systems, and with the proviso that it was understood to comprise a group of symptoms which might belong to various conditions.

Dr. Gray had stated, he went on to say, that in the class of reflex cases all that was necessary to do was to remove the cause. There was often, however, an acquired condition, the result of reflex irritation, in which the whole nervous system was at fault. The removal of a local cause, whether about the eye, the nasal cavity, or elsewhere, was not always sufficient. In many cases we were still obliged to treat the individual for other neurasthenic symptoms cropping out in different forms.

In lithæmic cases the question of rest or of exertion for the patient was one which he thought must be specially determined in each individual case. In many instances increased activity of a kind entirely different from that to which the patient had been accustomed constituted the most satisfactory means of treatment; and he knew of nothing so good as moderate mountain climbing with a pleasant companion, especially if there were any hypochondriacal elements in the case.

Dr. Wm. H. Thomson said that the term neurasthenia was, no doubt, a very impressive one to use sometimes to patients, but otherwise he abominated it. It ought to be placed, he thought, on the same level as tonic, a word that led to more bad practice than any other in medicine, since remedies which acted in all sorts of different ways were all called tonics. When a patient came to him affected with nervous debility without appreciable organic disease, he said he always put to himself the question whether the individual were not suffering from one of four causes, viz.: virtual starvation; over-strain; some unnatural drain on the system; self-poisoning. Those who were the subjects of virtual starvation (usually females), it would be found, ate no breakfast to speak of, and probably took for their other meals principally tea, bread and sweets. They did not get sufficient nourishment to maintain their respiration and circulation; and the rest cure was therefore the best for them. In the second class rest and food were also required, and oftentimes a change of surroundings. In the third class the drain, whatever it was, should be checked if it could, and the patient would then get well. The fourth class, that of self-poisoning, was the most common of all, and it was well illustrated by a case that had recently been under his care. A gentleman came to him suffering from cloudy mind in the daytime and insomnia at night, and he was completely relieved by means of bismuth, columbo and naphthalin. Another similar case was also successfully treated with intestinal antiseptics.

It was only very recently, Dr. Thomson continued, that, after paying special attention to various divisions of the organism in turn, we are coming back to that old part of the body that our forefathers used to regard as of so much importance, the bowels. At all times fermentations were going on in the intestines, and at the best moments of our lives putrid ptomaines were going into the kidneys, the liver, and other organs. The trouble with such patients as he was now speaking of was that they were suffering from prolonged self-poisoning, resulting from a deficiency of the natural antiseptics of the intestines, viz.: the secretions. This was the lithæmic neurasthenia of Dr. Gray. Having referred to the quality of the pulse and the character of the urine, which served as useful guides, he said that he had faith in only one real cure, and that was tent-life in the woods.

Dr. A. Jacobi said that of late it had been the tendency in medicine to get rid as far as possible of all names given to symptoms merely, and neurasthenia was of this class. We could speak of it only as a symptom, and it was a symptom common to so many conditions that the sooner it was abandoned the better. It was not simply weakness alone; we had been told that it was a chronic malnutrition of the nervous centres, due either to various adventitious causes or to an hereditary tendency. But congenital neurasthenia did not exist alone. With it was associated weakness of the circulation and the whole constitution. In every case of so-called neurasthenia, then, it should be our endeavor to make a diagnosis, if possible, of the original condition that gave rise to the symptoms met with.

Dr. A. D. Rockwell said that although unprepared to discuss the question at length, he could not refrain from the statement that he believed in the existence, just as he did in that of malaria. The term was, with limitations, a valuable one; although he thought it had been very much abused. The most important point of differentiation was between primary nervous exhaustion and lithæmia.

Dr. S. Baruch said that he was convinced that there was a complex of symptoms which was best designated by the term neurasthenia. In its treatment the principal indication was to prevent tissue change, and there was perhaps no better

method of securing this than hydro-therapy. Many of his patients suffering from this trouble he directed to take a cold plunge-bath every morning; care being taken that prompt reaction followed. He still believed in the term tonic also, and he thought the cold plunge one of the most valuable tonics that we had.

Dr. E. D. Fisher thought the word neurasthenia would be a very convenient one to retain until our knowledge of nervous diseases had become more complete than it was at present. The principal objection to its use was the danger of mistaking for the condition it implied some of the grave organic diseases, especially in the incipient stage; and it was necessary, therefore, that we should be on our guard in this respect. As regards the treatment of neurasthenia, since this condition represented merely functional disturbances, so far as we knew, uniformity was impossible, and each case must be handled according to its individual circumstances.

In closing the discussion Dr. Gray said that one of his objects in writing the paper was to elicit such an expression of opinion from various observers as had now been given. On the whole, it seemed to him that there was an immaterial difference between his own standpoint and that of those who objected to the term neurasthenia. There were certainly many symptoms not of organic origin which we could not classify without resorting to some such expression. It was, therefore, of practical service to retain it, and the subdivision into the three classes which he had indicated seemed to him a convenient one. In the future such advances would no doubt be made that many points which were now obscure would be cleared up, and many of our views would accordingly be modified. P. B. P.

Cataract Extraction.

Dear Sir:—I read with great interest the article on "Cataract Extraction, etc.," by Julian J. Chisholm, M.D., in THE JOURNAL of November 3, 1888. I think Dr. Chisholm is correct in reducing restraints put on patients after the extraction of cataract. I have been an advocate of such a measure, as not putting the patients to bed afterwards, or if at all for a few hours only, for some years. Since my connection with the University of Louisville I have operated on, in the amphitheatre there, 40 or 45 cases of senile cataract. These patients have each walked or rode from five blocks to five miles immediately after the operation, and I have to record the first case in which any serious inflammation has followed, in the person of a man over 80 years old, who removed his bandage the second morning and took a walk. I believe, with Dr. Chisholm, that with less restriction the eye does fully as well and the patient's general condition is left much better. I regret though to see Dr. Chisholm apologizing for, or rather trying to account for his average of success, by saying, in reply to Dr. Knapp, that his assistant, "Dr. Belt has explained in his paper how these cases were failures in seeing, even when no inflammatory complication had arisen during the after-treatment of the cases; and how an ophthalmoscopic examination showed glaucoma, nerve atrophy and choroidal patches."

Is it customary to operate on such cases? Is it not nearly as possible to make such a diagnosis before the extraction of the cataract as afterwards? As the saying goes, "What is the matter with the candle test of the visual field? Let us show mercy, and consideration for the comfort of those who must submit to our dictation," by dictating that an operation is not advisable under such conditions as no vision will result. You cannot have a disease of the front of the eye which will shut out quick perception of light if the retina, choroid and optic nerve are sound. I never extract or needle a cataract without making the candle test of the visual field. Dr. Chisholm will find in the book commonly used for recording cases of cataract extractions a place for such a record, marked "visual field." Yours,

W. CHEATHAM, M.D.

303 Chestnut St., Louisville, Ky., Nov. 7, 1888.

Sour Milk and Buttermilk in the Prevention and Treatment of Diphtheria.

Dear Sir:—The quoted article on "Diphtheria in Cats," in a recent issue of THE JOURNAL, reminds me of a case of this disease occurring in a favorite Maltese cat of mine many years ago, and for the relief of which I ordered *sour* milk and buttermilk, which she eagerly took and speedily recovered. These were exhibited as comprising the essential nutritive and remedial properties combined in an acceptable form, and to satisfy the instinctive desire for acidulous substances existing in diphtheria with kindred diseases. The milk is most nourishing and partly predigested, while the lactic acid therein, to which they owe their medicinal power, is an active digestive, depurant, refrigerant, antiscorbutic, antiphlogistic, antiseptic and febrifuge, solvent of the fibro-plastic membranous exudate, and general resolvent of this disease with collateral maladies. They are hence generally applicable in the preventive and curative treatment of scorbutic, malarial, inflammatory, infectious, contagious and pernicious diseases, local and constitutional, both in the inferior animals and human beings. Therefore, if people would drink sour milk and buttermilk, sweetened if desired, and give them to dependent children and the lower animals, instead of throwing them away as worthless, thus wasting a valuable nutritive and medicament, they would protect themselves and subjects largely against and

relieve some of the most pestilential and virulent diseases known, as well as many of the minor ailments of life. Alone or in conjunction with the mineral and vegetal acids, and other suitable nourishment and remedies as specially indicated, I have exhibited them for many years and can fully testify to their superior value as nutrient, preventive and resolvent agents in such maladies. Sour milk and buttermilk thus act both as valuable, agreeable food and medicine that can be used *ad libitum*, besides being cheap, abundant and convenient. Each should be taken frequently as an effective digestive, antalkaline, and prophylactive to neutralize the superalkalinity of blood and system as often occurring, and to ward off or relieve diphtheria, scorbutic, inflammatory and pestilential maladies of every grade and character, in cats, dogs, pigs, and other inferior animals, in common with mankind.

GEORGE J. ZIEGLER, M.D.

November 11, 1888.

BOOK REVIEWS.

THE LIFE INSURANCE EXAMINER. A Practical Treatise upon Medical Examinations for Life Insurance. By CHARLES F. STILLMAN, M.S., M.D., Medical Examiner for the Mutual Life Insurance Company; Examining Surgeon of the Travelers Insurance Company of Hartford, etc., 8vo, pp. 186, 16, viii. New York: The Spectator Company. 1888. Chicago: W. T. Keener.

The medical examiner for life insurance occupies an important position; a careless or incomplete examination will generally result in injustice to the applicant for insurance or to the company. The lines of procedure of the medical examiner are being drawn more sharply and closely, and the time has come when the examiner must be exact, or as exact as possible, and must render decisions based on scientific facts, so far now known.

Dr. Stillman is well known by his work in orthopædic and general surgery, and for exactness and completeness in all the work he undertakes. The book before us is divided into three parts, the first dealing with "Life Insurance Formalities," the medical examiner's report, instructions to medical examiners, the agent's report, and instructions to agents. Part II treats of "Examination of the Applicant," identification, environment, physique, physical diagnosis. Part III relates to the "Diseases relating to Life Insurance," hereditary influences, nutrition and diathesis, etc. An appendix contains legal questions relative to medical examiners, and other matter, including life insurance statistics.

The book contains a superimposed dissected colored plate of the anterior aspect of the body, made by the author, an engraving from life of a candidate stripped for an insurance examination, and a number of engravings of the microscopic appearance of urinary deposits. Life insurance methods are now far beyond those of a dozen years ago, and the books on the subject, written at that time are now out of date. The present work is for the active examiners for life insurance, and to them we can heartily recommend it.

THE MODERN TREATMENT OF DISEASES OF THE LIVER. By PROFESSOR DUJARDIN-BEAUMETZ. Translated by E. P. HURD, M.D. Published by Geo. S. Davis, Detroit, Mich. Pp. 185. Price 25 cents.

The volume before us is one of the Physician's Leisure Library Series for 1888. The translation is very well made. The book is most interestingly written. As is always true of what Dujardin-Beaumetz writes, much that is now in physiology, as well as what is now in the therapeutics of the diseases discovered, can be found here. The various chapters bear the following titles: The Liver from a Therapeutic Standpoint, Cholagogues, Treatment of Biliary Lithiasis, Treatment of Jaundice, Treatment of Engorgements of the Liver; Treatment of Inflammations of the Liver, Treatment of Hydatid Cysts of the Liver.

MISCELLANEOUS.

A TRAINING SCHOOL FOR NURSES has been opened in connection with the General Public Hospital at St. John, N. B.

DR. H. S. PIGGINS, who for a number of years has been practicing his profession at Caledonia, Minn., has removed to Duluth.

DR. FRANCIS J. GOULD, who died of yellow fever in Jacksonville, Fla., was a native of Lexington, Mass., and a graduate of Harvard, class of 1850. He was 60 years of age.

DR. JOSEPH O'DWYER, the originator of intubation of the larynx, has been appointed Professor of Diseases of Children in the New York Post-Graduate Medical School and Hospital.

MILK SICKNESS.—Isaiah Everly, of Patricksburg, Ind., died of milk sickness on November 1, his widow is seriously ill, and cattle have perished from the disease, which prevailed twenty-five years ago on the same farm.

NO EPIDEMIC AT DEMARARA.—A report from the U. S. Consul at Demarara to the Department of State says that there have been but two cases of yellow fever there, and that his bills of health while showing that the disease exists does not make it appear that it is epidemic.

CHARLES H. PHILLIPS, for many years a prominent manufacturer of chemicals, of New York city, died suddenly of apoplexy, on Nov. 5. He was a member of the

American Geographical Society, President of the C. H. Phillips Chemical Co., and connected with all the prominent societies in his line of business.

A TERRIBLE CATTLE DISEASE is raging in the Philippine Islands. In one province alone over 66,000 animals have died.

THE DISTRICT MEDICAL SOCIETY OF CENTRAL ILLINOIS will hold its semi-annual meeting in the Court House at Vandalia, on Tuesday, November 20, 1888. J. Huber, M.D., of Pana, is President, and J. H. Miller, M.D., of Oconee, is Secretary.

THE SECTION ON DISEASES OF CHILDREN of the American Medical Association, at the last annual meeting, appointed the following committee to investigate the subject of infant feeding, viz.: C. W. Earle, M.D., of Chicago; W. B. Atkinson, M.D., of Philadelphia; and W. S. Christopher, M.D., of Cincinnati, Ohio.

SIX CHILDREN AT A SINGLE BIRTH.—At Dallas, Tex., on Nov. 3, Mrs. Geo. Hirsh, of Navarro county, gave birth to six children. The mother and children are doing well. There are four boys and two girls. All are perfect and fully proportioned, but very small. The babies are all tagged, to preserve their identity.

DAMAGES FOR MALPRACTICE.—That the character of the medical school or sect to which a practitioner of medicine belongs does not relieve him from liability, is shown by a recent decision of the Supreme Court of Wisconsin. C. F. Harrington is a clairvoyant and physician of Madison. He treated a man named Thomas Nelson for many months for rheumatism, whereas he had hip disease, and by reason of this malpractice Nelson was crippled for life. He brought suit against Harrington for damages, and obtained a judgment of $1,500 in the lower court. Harrington appealed, his contention being that he should be free from liability because Nelson was fully aware of the peculiar medical school to which he belonged. The Supreme Court confirmed the judgment of the lower court, holding that the question of the character of the medical school in no manner whatever relieved a doctor from liability for malpractice. This is the first time on record, we believe, that this peculiar phase of this question has come up in the high courts.

HEALTH IN MICHIGAN.—For the month of October, 1888, the reports indicate that tonsillitis, neuralgia, typho-malarial fever, influenza, bronchitis and scarlet fever increased, and that diarrhœa, dysentery, cholera morbus, decreased in prevalence.

Compared with the average for the month of October for the nine years, 1879–1887, the reports indicate that consumption of the lungs, intermittent fever, diarrhœa, remittent fever and tonsillitis were less prevalent in 1888. For the month of October, 1888, compared with the average for corresponding months in the nine years, 1879–87, the temperature was lower, the absolute humidity and the day and night ozone were less, and the relative humidity was about the same.

Including reports by regular observers and others, diphtheria was reported present at thirty-six places in Michigan in October, 1888, scarlet fever at thirty-two places, typhoid fever at forty-three places, and measles at seven places.

Reports from all sources show diphtheria at sixteen places more, scarlet fever at eight places more, typhoid fever at eight places more, and measles at the same number of places in October, when compared with the preceding month.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION will hold its first annual meeting at Birmingham, Ala., December 4, 5 and 6, 1888. The officers for 1888 are: President, Dr. W. D. Haggard, Nashville, Tenn.; Secretary, Dr. W. E. B. Davis, Birmingham, Ala.; Judicial Council, Dr. John S. Cain, Nashville, Tenn., Dr. Hunter McGuire, Richmond, Va., Dr. J. M. Taylor, Corinth, Miss., Dr. DeSaussure Ford, Augusta, Ga., Dr. R. A. Kinloch, Charleston, S. C.; Chairman Committee of Arrangements, Dr. J. D. S. Davis, Birmingham, Ala.

FIRST DAY.—MORNING SESSION.

The Association will be called to order by the President at 10 o'clock, A.M.
Prayer by the Rev. D. I. Purser, D.D.
Address of Welcome, by Hon. A. O. Lane.
Reading of Minutes.
Report of the Committee of Arrangements.
Report of the Judicial Council.
Miscellaneous Business.
The Annual Address of the President, Dr. W. D. Haggard, Nashville, Tenn.

Papers.—Gastrostomy, by W. B. Rogers, M.D., Memphis, Tenn. Superinvolution of the Uterus following Trachelorraphy, by Virgil O. Hardon, M.D., Atlanta, Ga. Indications for Operative Interference in Cerebral Troubles, T. O. Summers, M.D., Jacksonville, Fla. A Case of Tubal Pregnancy, presenting Interesting Medico-Legal Relations, E. P. Sale, M.D., Memphis, Tenn. The Extravagancies and Impractical Requirements of Modern Antiseptic Surgery, so far as the Country Practitioner is Concerned, by J. M. Taylor, M.D., Corinth, Miss. Antiseptics in Surgery and Gynecology, by F. T. Meriwether, M.D., Asheville, N. C. My Antiseptic Bags; or Practical Aseptic Surgery, by J. W. Long, M.D., Randleman, N. C.

Adjournment at 2 P.M.
Excursion to North Birmingham at 3:45 P.M.

EVENING SESSION, AT 8 P.M.

The Annual Oration, by Dr. W. F. Hyer, of Meridian, Miss., at O'Brien's Opera House. After the Oration the audience will be entertained by the Mendelssohn Club.

SECOND DAY.—MORNING SESSION, AT 9:30 A.M.

Report of Treasurer.
Report of Judicial Council.
Miscellaneous Business.

Papers.—Floating Kidney, with Vicarious Menstruation, by DeSaussure Ford, M.D., Augusta, Ga. New Treatment of Intra-Uterine Fibroids, by E. J. Beall, M.D., Fort Worth, Texas. The Medical Treatment of Fibroid Tumors of the Uterus, by Bedford Brown, M.D., Alexandria, Va. Alexander's Operation, by W. L. Nichol, M.D., Nashville, Tenn. The Present Status of Electro-Therapeutics in Gynecology, by J. R. Buist, M.D., Nashville, Tenn.

Excursion to Gate City at 3:45 P.M.

EVENING SESSION, AT 8 P.M.

Hysterectomy in Cancer of the Uterus, by W. H. Wathen, M.D., Louisville, Ky. Fractures of the Forearm, by Jno. Brownrigg, M.D., Columbus, Miss. Treatment of Fractures with Plaster of Paris Splints, by W. F. Westmoreland, Jr., Atlanta, Ga. Interesting Cases of Surgery, by R. M. Cunningham, Pratt Mines, Ala. The New Departure in Uterine Therapeutics—the Dry Method, by T. A. Means, M.D., Montgomery, Ala. A Study of the Various Methods of Treatment of Laceration of the Perineum and Rectocele, with Report of Cases, by J. H. Blanks, M.D., Meridian, Miss. Perineal Lacerations, by M. C. Baldridge, M.D., Huntsville, Ala.

THIRD DAY.—MORNING SESSION, AT 9:30 A.M.

Report of Judicial Council.
Unfinished and Miscellaneous Business.

Papers.—Cystoscopic Explorations, by A. V. L. Brokaw, M.D., St. Louis, Mo. Shock of Injury and Its Effects, by Jno. R. Page, M.D., Birmingham, Ala. Some Practical Thoughts in Surgery and Gynecology, by James Guild,

M.D., Tuscaloosa, Ala. The Field and Limitation of Laparotomy, by I. S. Stone, M.D., Lincoln, Va. Operative Procedures in Epilepsy, by J. T. Wilson, M.D., Sherman, Texas. Surgical Tuberculosis, by W. Locke Chew, M.D., Birmingham, Ala.

AFTERNOON SESSION, AT 3 P.M.

Treatment of Certain Forms of Menorrhagia, with Report of Cases, by W. D. Bizzell, M.D., Atlanta, Ga. Electrolysis in the Treatment of Urethral Strictures, by S. M. Hogan, M.D., Union Springs, Ala. Operative Procedures in Hypertrophy of the Prostate, by R. D. Webb, M.D., Birmingham, Ala. Electrolysis in Morbid Alterations produced in the Prostate by Gonorrhœa of the Urethra, by J. D. S. Davis, M.D., Birmingham, Ala. Dermoid Cysts of the Coccygeal Region, by E. J. Beall, M.D., Fort Worth, Texas.

EVENING SESSION, AT 8 P.M.

Discussion—Abdominal Surgery.
Election and Installation of Officers.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department U. S. Army, from November 3, 1888, to November 9, 1888.

Lieut.-Col. Basil Norris, Surgeon, will be relieved from duty in the Department of the Columbia by the commanding General of that Department, and will report in person, on or before November 14, 1888, to the commanding General Div. of the Pacific, for duty as Medical Director of that Division and of the Department of California. Par. 14, S. O. 255, A. G. O., Washington, November 1, 1888.

By direction of the Secretary of War, Lieut.-Col. Edward P. Vollum, Surgeon, on being relieved from duty as Medical Director Dept. of Texas by Lieut.-Col. Joseph C. Baily, Asst. Medical Purveyor, under War Department order dated October 31, 1888, S. O. 255, A. G. O., will repair to New York City, assume the duties of acting Asst. Medical Purveyor, and take charge of the medical purveying depot at that place. Par. 2, S. O. 255, A. G. O., Washington, November 1, 1888.

Lieut.-Col. Charles T. Alexander, Surgeon, is relieved from further duty in the Dept. of Dakota, and will report in person to the commanding General Dept. of the Columbia for duty as Medical Director of that Department. Par. 14, S. O. 255, A. G. O., Washington, November 1, 1888.

Col. Joseph C. Baily, Asst. Medical Purveyor, is, at his own request, relieved from the charge of the medical purveying depot in New York City, and is, by direction of the President under the provisions of the Act of Congress approved June 23, 1874, assigned to duty as surgeon in the Medical Department. He will report in person to the commanding General Dept. of Texas for assignment to duty as Medical Director of that Department, to relieve Lieut.-Col. E. P. Vollum, Surgeon. Par. 1, S. O. 255, A. G. O., Washington, November 1, 1888.

By direction of the Secretary of War, Lieut.-Col. Joseph C. Baily, Asst. Medical Purveyor, will transfer at once the public funds for which he is now responsible to Capt. Henry Johnson, Medical Storekeeper, who will assume temporary charge of the medical purveying depot in New York City, retaining charge thereof until relieved in person by Lieut.-Col. E. P. Vollum, Surgeon, under his assignment as acting Asst. Medical Purveyor, to whom Capt. Johnson will then transfer the public funds. Par. 1, S. O. 257, A. G. O., Washington, D. C., November 3, 1888.

Major Henry McElderry, Surgeon U. S. Army, granted leave of absence for two months, by direction of the Secretary of War, to take effect on the completion of his present duties. Par. 3, S. O. 256, A. G. O., Washington, D. C., November 2, 1888.

Capt. Clarence Ewen, Asst. Surgeon, is relieved from duty at Ft. Sidney, Neb., to take effect on the expiration of his present leave of absence, and will report in person to the commanding officer, Madison Bks., N. Y., for duty at that post. Par. 2, S. O. 258, A. G. O., Washington, November 5, 1888.

Capt. Daniel M. Appel, Asst. Surgeon, is relieved from duty at Ft. Davis, Texas, and will report in person to the commanding officer, Ft. Sill, Ind. Ter., for duty at that post, reporting by letter to the commanding General Dept. of the Missouri. Par. 2, S. O. 258, A. G. O., Washington, November 5, 1888.

Capt. J. Van R. Hoff, Asst. Surgeon, is granted leave of absence for one month, with permission to apply for an extension of one month. S. O. 134, Dept. of the Missouri, Ft. Leavenworth, Kan., November 1, 1888.

Capt. Curtis E. Price, Asst. Surgeon, granted leave of absence for two months, with permission to apply for an extension of ten days. Par. 2, S. O. 257, A. G. O., Washington, November 3, 1888.

Capt. Marshall W. Wood, Asst. Surgeon, granted leave of absence for one month, with permission to apply for an extension of ten days. Par. 2, S. O. 257, A. G. O., Washington, November 3, 1888.

By direction of the Secretary of War, Capt. John J. Cochran, Asst. Surgeon, is relieved from temporary duty at Hdqrs. Div. of the Pacific, and will report in person to the commanding officer, Ft. Adams, R. I., for duty at that post. Par. 2, S. O. 256, A. G. O., Washington, November 2, 1888.

By direction of the Secretary of War, Capt. Norton Strong, Asst. Surgeon, is relieved from duty in the Dept. of Ariz., and will report in person to the commanding officer, Ft. Schuyler, N. Y., for duty at that post, and by letter to the commanding General Div. of the Atlantic. Par. 4, S. O. 255, A. G. O., Washington, November 1, 1888.

Capt. W. O. Owen, Jr., Asst. Surgeon, Ft. Leavenworth, Kan., will proceed at once to Ft. Sill, Ind. Ter., and report to the commanding officer for temporary duty at that post. Hdqrs. Dept. of the Missouri, S. O. 133, par. 1, Ft. Leavenworth, Kan., October 30, 1888.

By direction of the Secretary of War, First Lieut. James D. Glennan, Asst. Surgeon, recently appointed, will repair from this city to Willets Point, N. Y., and report in person to the commanding officer of that post for duty. Par. 3, S. O. 255, A. G. O., Washington, November 1, 1888.

By direction of the Secretary of War, First Lieut. Alfred E. Bradley, Asst. Surgeon (recently appointed), will report in person to the commanding officer, David's Island, N. Y., for duty at that depot, reporting by letter to the Superintendent of the recruiting service, New York City. Par. 14, S. O. 260, A. G. O., November 7, 1888.

Official List of Changes in the Medical Corps of the U. S. Navy for the Week Ending November 10, 1888.

Surgeon D. Dickinson, ordered to Naval Hospital, Mare Island, Cal.

Surgeon G. P. Bradley, detached from Naval Hospital, New York, and to "Iroquois."

Surgeon R. C. Persons, detached from Army and Navy Hospital, Hot Springs, Ark., and to Naval Hospital, New York.

P. A. Surgeon Ernest Norfleet, detached from Naval Hospital, Mare Island, Cal., and to the "Trenton."

Asst. Surgeon H. N. T. Harris, detached from Naval Hospital, Mare Island, Cal., and to the "Kearsarge."

Asst. Surgeon J. S. Sayre, ordered to examination for promotion.

P. A. Surgeon H. G. Beyer, detached from "Trenton" and granted six months' leave, with permission to leave the United States.

Patrick H. Bryant and Luther L. von Wedekind, commissioned Asst. Surgeons U. S. Navy.